

Discussion Paper No. 740

**AUCTIONS FOR PUBLIC CONSTRUCTION
WITH CORNER-CUTTING**

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May 2009
Revised August 2010

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Auctions for Public Construction with Corner-cutting[‡]

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May 31, 2010

Abstract: This paper reports the theoretical and experimental results of auctions for public construction in which firms cut corners. We show that the winning bids and the winner's quality choices of the constructed buildings are both zero in equilibria if there are at least two firms whose initial cash balances are zero, and it is a common knowledge. The experimental results are close to the theoretical results and indicate that firms with zero-initial cash balance win and that the winning bids and the winner's quality choices of the constructed buildings are considerably low.

JEL classification: C92; D44; L15

Key words: Corner-cutting; Public procurement; First-price auction; Experiment

[‡]This is revised version of "Auctions for Public Construction with Corner-cutting" published in ISER Discussion Paper No. 740.

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1. Introduction

Auctions are a transparent and fair method of public procurement, and are commonly employed in the public sector. Corner-cutting is a critical issue to consider in construction contracts. In this context, corner-cutting refers to the construction of low-quality buildings to save costs and/or time. Corner-cutting may have grave consequences in construction, including even a high death toll¹. However, much of the literature on auctions has failed to take it into account. This article aims to explicitly introduce corner-cutting into procurement auctions, to theoretically investigate its effect, and to examine the theoretical predictions through experiments.

In our model, the firms chosen through auctions as contractors have the option of cutting corners instead of constructing the “proper” quality of building, which is specified by the procurement authority. The more the contracting firms cut corners, that is, the more they save on construction costs, the lower the quality of their constructed buildings, which results in a higher probability of detecting these instances of corner-cutting. If corner-cutting is detected, a contracting firm is required to pay a penalty in accordance with the scale of corner-cutting. However, the penalty payment is limited by the firm’s cash balance with the possibility of bankruptcy. Thus, the profit maximizing level of corner-cutting depends on the cost of constructing buildings of the proper quality, penalty rates, financial positions, and contract prices (winning bids).

In this article, we focus on problems that will occur when the auction authorities of public sectors do not limit participant qualification and auctions are opened to any firms. For this purpose, we make the assumption that *there are at least two firms whose initial cash balances are zero*. The cash balances of firms on the brink of bankruptcy are virtually zero. If several such firms participate in the auctions, the above assumption holds. During recessions, many construction firms become bankrupt. Thus, if auctions in public sectors are made open to any firms during such periods, then the above assumption becomes reasonable. Statistically speaking, even in non-recessionary periods, some construction firms go bankrupt. If the auctions are open to any firms, those firms on the brink of bankruptcy would be more eager to participate in the auctions, and the assumption would be plausible.

We find that under the above assumption, *in equilibria, zero-initial cash balance firms win auctions by bidding zero amount, and the qualities of constructed buildings are zero*. Our experimental results support this theoretical finding, and indicate that the firms with zero initial cash balance win and that the winning bids and the qualities of the constructed buildings are considerably low.

There are many special rules in public construction auctions, aimed at preventing corner-cutting, most of which are ignored in auction theory. For example, many public procurement authorities in Japan and European countries such as Belgium, Italy, Portugal, Spain, and Greece set minimum prices to exclude or detect abnormally low tenders². Alternatively, only designated bidders—as deemed qualified on the basis of factors such

¹For example, the New York Times (January 13, 2010, Flawed Building Likely a Big Element) reported the following: “Engineers and architects who have worked in or visited Haiti say that substandard design, inadequate materials and shoddy construction practices likely contributed to the collapse of many buildings in the earthquake that struck Tuesday. . . . Concrete is very expensive — much of the cement for it comes from the United States, Mr. Dooley said — so some contractors cut corners by adding more sand to the mix. The result is a structurally weaker material that deteriorates rapidly, he said. Steel reinforcing bar is also expensive, he said, so there is a tendency to use less of it with the concrete.”

²Please refer to the website of The European Commission (1999).

as locality, technological ability, and financial position—are invited to procurement auctions. Such special rules curb competition in auctions and are often criticized for affecting the transparency and fairness of auction. However, our results suggest that the reform of abolishing the special rules in procurement auctions would lead to corner-cutting, and rather undermine social welfare.

Quality choice in procurement auctions has been previously studied by Sinclair-Desgagne (1990), Dasgupta and Spulber (1990), Che (1993), Ungern-Sternberg (1994), Manelli and Vincent (1995) and Naegelen (2002)³. However, while our article focuses on corner-cutting behavior, the option of corner-cutting is excluded in their models. In their models, firms submit qualities as well as prices, but winning firms are assumed to produce the goods of the qualities they submit.

The bankruptcy problem in procurement auctions has also been studied. Ganuza (2007) introduces examples of procurement projects in Europe and the US where costs overran the winning bids and caused bankruptcy, which resulted in massive delays. Calveras et al. (2004) theoretically show that firms with a small amount of initial cash balances can make a profit by bidding low and declaring bankruptcy if the cost is found to be high in the second-price auction. In the procurement auction experiments when costs are independent private values, Cox et al. (1996) find that cost overruns result from too-low bids of the first-price auction, and Brosig and Reiß (2007) find that bids in the first-price auction are lower than the theoretical predictions. However, these articles have also excluded corner-cutting behavior in their models.

The remainder of the paper is organized as follows. Section 2 develops the theoretical model. Section 3 analyzes the equilibrium. Section 4 details the experimental procedures. Section 5 analyzes the results, and section 6 summarizes the conclusions.

2. Model Description and Notations

There are n construction firms. Each firm i has a cash balance w_i in the beginning, which represents its financial condition. We call w_i the “initial cash balance” of firm i . Each firm i also has a “proper cost” d_i . This means that the firm needs to spend d_i to construct a building of “proper quality,” i.e. the quality specified in the procurement authority. A firm’s proper cost represents its technological competence.

The public sector employs the first-price auction in choosing a contractor from construction firms. Each firm i submits its bid b_i to the procurement authority of the public sector. The firm with the minimum bid wins and is awarded the contract. Ties are broken with equal probability. The contract price is the winner’s bid.

The firm chosen as a contractor, say firm i , does not necessarily spend its proper cost on construction. Instead, the contractor might “cut corners” and spend a smaller amount. Denote by c_i the cost spendings that firm i actually pays for construction. We assume that the scale of corner-cutting is represented by $d_i - c_i$, and the quality of the constructed building is determined by $q_i = c_i/d_i$. For example, suppose that $d_i = 100$, but firm i spends only $c_i = 80$ for construction. Then, the scale of corner-cutting is 20, and the quality is 0.8.

After the contractor constructs a building, the procurement authority investigates its quality. The lower the quality of the constructed building, the higher the probability of the authority detecting corner-cutting. If $q_i = 1$, that is, if the contractor does not cut

³Although Dasgupta and Spulber (1990) consider the flexible quantity instead of quality in their context, their quantity context can be read as quality in our context.

corners, then the probability of detection is zero. Conversely, if $q_i = 0$, that is, if the contractor does not spend any cost for construction, the probability of detection is one. For simplicity, we assume that the probability that the authority detects corner-cutting is $1 - q_i = (d_i - c_i)/d_i$. If $d_i = 100$ and $c_i = 80$ as in the above example, the probability of detection is 0.2.

If the authority detects corner-cutting, it imposes a penalty on the contractor. The greater the scale of corner-cutting, the larger is the amount of penalty. For simplicity, we assume that the penalty is proportional to the scale of corner-cutting, and the penalty rate is given by $r > 1$. That is, if the scale of corner-cutting is $d_i - c_i$, the penalty is $r \cdot (d_i - c_i)$.

If the contractor who has cut corners and has been detected has enough cash balance to pay the penalty—that is, if penalty $r \cdot (d_i - c_i)$ is less than or equal to the contractor's cash balance, $w_i + b_i - c_i$, at that point of time—then he pays the penalty. Otherwise, the contractor goes bankrupt and pays only the cash balance $w_i + b_i - c_i$.

The contract procedure in the public sectors is summarized as follows.

Stage 1 (Auction Stage): Each firm submits bid b_i to the authority. The firm with the minimum bid wins and is chosen as the contractor. The contract price is the winning bid.

Stage 2 (Construction Stage): The contractor determined in Stage 1, say firm i , receives the contract price b_i and chooses spending c_i for construction.

Stage 3 (Investigation Stage): The procurement authority investigates whether the contractor has cut corners in construction. The probability of corner-cutting being detected is $(d_i - c_i)/d_i$.

Stage 4 (Penalty Stage): If corner-cutting $d_i - c_i$ is detected in stage 3, a penalty $r \cdot (d_i - c_i)$ is imposed on the contractor. If $w_i + b_i - c_i \geq r \cdot (d_i - c_i)$, the contractor pays $r \cdot (d_i - c_i)$. Otherwise, he goes bankrupt and only pays $w_i + b_i - c_i$.

The profit π_i of a firm is defined as its final cash balance minus its initial cash balance. It is computed as follows: Suppose firm i bids b_i .

(i) If firm i does not win the auction, then since its final cash balance is equal to its initial cash balance, $\pi_i = 0$.

(ii) If firm i wins the auction, spends c_i on construction, and corner-cutting is not detected, then since its final cash balance is $w_i + b_i - c_i$, $\pi_i = b_i - c_i$.

(iii) If firm i wins the auction, spends c_i on construction, and corner-cutting is detected but it does not go bankrupt, then since the final cash balance is $w_i + b_i - c_i - r \cdot (d_i - c_i)$, $\pi_i = b_i - c_i - r \cdot (d_i - c_i)$.

(iv) If firm i wins the auction, spends c_i on construction, and corner-cutting is detected and it goes bankrupt, then since the final cash balance is 0, $\pi_i = -w_i$.

The procurement process is an incomplete information game in the sense that initial cash balances and proper costs are private information. That is, each firm knows only its own initial cash balance and proper cost, but not those of the others. We denote the initial cash balance profile by $w = (w_1, \dots, w_n)$, and the proper cost profile by $d = (d_1, \dots, d_n)$. Further, we denote the class of initial cash balance profiles by W , and the class of proper

cost profiles by D . We assume that W and D are both finite.⁴ For each firm i , let W_i be the projection of W on the i th coordinate, D_i be the projection of D on the i th coordinate. Let $W_{-i} = \prod_{j \neq i} W_j$ and $D_{-i} = \prod_{j \neq i} D_j$.

Let $\Pr(\cdot)$ be a probability distribution on $W \times D$. That is, $\Pr(W \times D) = 1$, and for an event $X \subset W \times D$, $\Pr(X)$ is the probability of the event, that is, the probability that $(w, d) \in X$. When X is a singleton and $X = \{(w, d)\}$, we simply denote $\Pr(X)$ by $\Pr(w, d)$. For firm i , given its initial cash balance w_i and proper cost d_i , $\Pr_{-i}(\cdot; w_i, d_i)$ is the conditional probability on $W_{-i} \times D_{-i}$. In other words, $\Pr(W_{-i} \times D_{-i}; w_i, d_i) = 1$, and for an event $X_{-i} \subset W_{-i} \times D_{-i}$, $\Pr_{-i}(X_{-i}; w_i, d_i)$ is the probability of the event of X_{-i} under the condition that firm i 's initial cash balance is w_i and its proper cost is d_i .

As we discussed in Introduction, in this article, we make a special assumption that *with probability one, there are at least two firms whose initial cash balances are zero*. Let

$$W^* = \{w \in W : \exists i \ \& \ \exists j \text{ such that } i \neq j \text{ and } w_i = w_j = 0\}.$$

Then, the above assumption is $\Pr(W^* \times D) = 1$. We maintain this assumption throughout the article.

We assume that firms are risk-neutral and that the firms maximize their expected profits.

3. Theoretical Analysis

We theoretically analyze firms' behavior backward. In other words, we first analyze their behavior in Stage 2 and then in Stage 1.

3.1. Optimal spending: Behavior in Stage 2.

Firms enter Stage 2 only if they win the auction in Stage 1. Thus, the firms in Stage 2 are already contractors. We analyze how much a contractor spends for construction given its initial cash balance w_i and contract price b_i . In this subsection, since we focus on the behavior of one contracting firm and ignore the others, we omit appending subscripts to w_i , d_i , b_i , and c_i for simpler notation.

When corner-cutting is detected, and the deficit is greater than the limit, that is, $c + r \cdot (d - c) - b > w$, the contractor becomes bankrupt. Thus, if corner-cutting is detected, the constructor's profit is $\max\{b - c - r \cdot (d - c), -w\}$.

When the contractor spends the cost c , since the probability of the detection is $1 - d/c$, its expected profit $E\pi$ is:

$$E\pi = \frac{c}{d} \cdot (b - c) + \frac{d - c}{d} \cdot \max\{b - c - r \cdot (d - c), -w\}.$$

Since the firms are risk-neutral, they seek to maximize the expected profit $E\pi$ as defined above. Note that

$$b - c - r \cdot (d - c) \leq -w \quad \iff \quad c \leq [r \cdot d - (b + w)] / (r - 1).$$

Thus, a contractor goes bankrupt when corner-cutting is detected if and only if its spending c is less than $\bar{c} \equiv [r \cdot d - (b + w)] / (r - 1)$.

⁴We make this assumption for the experiments in Section 4. The essential parts of the theoretical analysis in Section 3 do not depend the assumption.

Given w , d , and b , let $c^*(w, d, b)$ be the optimal spending for w , d , and b , that is, the spending that maximizes the expected profit, and let $\Pi(w, d, b) = \pi(c^*(w, d, b))$.

Proposition 1 below characterizes the optimal spending and maximal expected profit given b , d , and w .

PROPOSITION 1: Let $\bar{b} = 2d - w - d/\sqrt{r}$. Then,

$$\begin{aligned} c^*(w, d, b) &= \begin{cases} (b + w)/2 & \text{if } b \leq \bar{b} \\ (1 - 1/2r) \cdot d & \text{otherwise,} \end{cases} \\ \Pi(w, d, b) &= \begin{cases} [(b + w)^2 - 4dw]/4d & \text{if } b \leq \bar{b} \\ b - d + d/4r & \text{otherwise.} \end{cases} \end{aligned}$$

The proof is provided in Appendix A. Proposition 1 states the following: (i) If the contract price b is smaller than threshold level \bar{b} , then the contractor's optimal choice c^* does not depend on its proper cost d . (ii) On the other hand, if the contract price b is greater than \bar{b} , then the contractor's optimal choice c^* does not depend on its initial cash balance w or contract price b . A contractor goes bankrupt when corner-cutting is detected if and only if $b < \bar{b}$.

Note that at $b = \bar{b} = 2d - w - \frac{d}{\sqrt{r}}$,

$$\frac{1}{4d} \cdot [(b + w)^2 - 4dw] = b - d + \frac{d}{4r}, \text{ and } \frac{b + w}{2} < (1 - \frac{1}{2r}) \cdot d.$$

Thus, the contractor's maximized expected profit $\Pi(w, d, b)$ is continuous with respect to b , but the optimal spending choice $c^*(w, d, b)$ is not. Figure 1 depicts the optimal spending choice c^* and the maximal expected payoff $\pi(c^*)$.

Figure 1 is around here.

For the analysis of the next subsection, we consider a firm's bid b^0 such that if it wins the auction by bidding b^0 , his expected profit will be zero in Stage 2. That is, b^0 is a bid such that $\Pi(w, d, b^0) = 0$. We term such a bid b^0 a "zero-profit bid." If $d - d/4r \geq \bar{b}$, then $b^0 = d - d/4r$, and if $d - d/4r < \bar{b}$, then by $(b^0 + w)^2 - 4dw = 0$, $b^0 = 2\sqrt{dw} - w$. Note that

$$d - d/4r \geq \bar{b} \Leftrightarrow w \geq d \cdot (2\sqrt{r} - 1)^2 / 4r.$$

Since $\Pi(w, d, b)$ is increasing in b , $\Pi(w, d, b) \geq 0 \Leftrightarrow b \geq b^0$. Therefore, we have Lemma 1 below.

LEMMA 1: (i) If $w \geq d \cdot (2\sqrt{r} - 1)^2 / 4r$, then $b^0 = d - d/4r$, and if $w < d \cdot (2\sqrt{r} - 1)^2 / 4r$, then $b^0 = 2\sqrt{d \cdot w} - w$.

(ii) $\Pi(w, d, b) \geq 0 \Leftrightarrow b \geq b^0$.

In an ordinal auction model for public construction, that is, a model in which firms have no option of corner-cutting, once a firm wins the auction in Stage 1, it is required to spend its proper cost in Stage 2; thus, the distinction between a firm's proper cost d and the cost c that the firms actually spend is meaningless. In the ordinal model, the expected profit of a firm is positive if and only if it wins the auction by bidding greater than its cost. Part (ii) of Lemma 1 implies that zero profit bids have similar properties in our model where firms have the option of corner-cutting. Part (i) implies that the zero profit bids of firms with zero initial cash balance are zero. These facts play important roles in analyzing the equilibria of the auction in Stage 1.

3.2. Bidding Equilibria: Behavior in Stage 1.

In this subsection, we analyze firms' bidding behavior in Stage 1 by employing the results of subsection 3.1. Since initial cash balances and proper costs vary, we depict firms' bidding behaviors as bidding functions. A *bidding function of firm i* is a function $b_i(\cdot, \cdot)$ of its initial cash balance w_i and its proper cost d_i . $b_i(w_i, b_i)$ is firm i 's bid in Stage 1 when its initial cash balance is w_i and its proper cost is d_i . We denote the bid function profile by $b(\cdot, \cdot) = (b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$.

When firm i bids b_i , the other firms follow $b_{-i}(\cdot, \cdot)$, and firm i 's initial cash balance and proper cost are w_i and d_i , respectively, *the probability that firm i wins the auction* is:

$$\sum_{k=1}^n \Pr(X_{-i}^k; w_i, d_i)/k,$$

where $X_{-i}^k \subset W^* \times D$ is the event that for any $j \neq i$, $b_j(w_j, b_j) \leq b_i$ and $\#\{j \neq i : b_j(w_j, b_j) = b_i\} = k - 1$, i.e. the event that firm i wins the auction by bidding b_i and $k - 1$ other firms bid the same amount b_i .

The conditional expected payoff $E_i(b_i, b_{-i}(\cdot, \cdot); w_i, d_i)$ of firm i when firm i bids b_i , the other firms follow $b_{-i}(\cdot, \cdot)$, and firm i 's initial cash balance and proper cost are w_i and d_i , respectively is:

$$E_i(b_i, b_{-i}(\cdot, \cdot); w_i, d_i) = \Pi_i(w_i, d_i, b_i) \cdot \sum_{k=1}^n \Pr(X_{-i}^k; w_i, d_i)/k,$$

where $\Pi_i(w_i, d_i, b_i)$ is the maximal expected profit given in Proposition 1.

The Bayesian Nash equilibrium defined below is a standard equilibrium concept of incomplete information games.

DEFINITION: A bid function profile $b(\cdot, \cdot) = (b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ is a *Bayesian Nash equilibrium* if for all firm i , all its cash balance w_i , all its proper cost d_i , and all its bid \widehat{b}_i ,

$$E_i(b_i(w_i, d_i), b_{-i}(\cdot, \cdot); w_i, d_i) \geq E_i(\widehat{b}_i, b_{-i}(\cdot, \cdot); w_i, d_i)$$

To characterize the Bayesian Nash equilibria of our model, we introduce a *zero winning-bid profile*. This is a bid function profile such that for all (w, d) ,

- i) there are two firms with zero initial cash balance who bid zero amount, and
- ii) all the firms with positive initial cash balance bid positive amount.

Note that since $\Pr(W^* \times D) = 1$, if firms follow a zero winning-bid profile, then with probability one, the winner is a firm with a zero initial cash balance and the winning bid is zero. Further, note that if the winner is a firm with a zero initial cash balance and the winning bid is zero, then it follows from Proposition 1 that in Stage 2, the winner spends nothing for construction, and so the quality of the constructed building is zero.

PROPOSITION 2: *Assume that there are at least two firms whose initial cash balances are zero with probability one. Then, a bid function profile is a Bayesian Nash equilibrium if and only if it is a zero winning-bid profile. At any Bayesian Nash equilibrium, the winner is always a firm with a zero initial cash balance, and the winning bid is always zero.*

It is straightforward to see that a zero winning-bid profile is a Bayesian Nash equilibrium. By Lemma 1, the zero-profit bids of firms with zero initial cash balance are zero, and those of the others are positive. Thus, at a zero winning-bid profile, the conditional expected profits of all firms are zero. A firm with a zero initial cash balance cannot win by a positive bid since another firm with zero initial cash balance bids zero. Thus, firms with zero initial cash balance cannot obtain a greater conditional expected profit by deviating from the zero winning-bid profile. If a firm with a positive initial cash balance bids zero, then it wins with positive probability, but winning by zero bid makes its expected payoff negative. Thus, firms with positive initial cash balances do not deviate either from the zero winning-bid profile.

Proposition 2 also states the converse claim, i.e. the claim that any Bayesian Nash equilibrium is a zero winning-bid profile. The intuition of this claim is that at a Bayesian Nash equilibrium, if the winning bid for some (w, d) is positive, then some firm i with zero initial cash balance can obtain a greater conditional expected profit than the equilibrium level by bidding an amount slightly smaller than the winning bid, which contradicts the equilibrium condition. We provide the formal proof of this claim in Appendix B.

It is also worthwhile to mention the robustness of the equilibria of Proposition 2. Typically, Bayesian Nash equilibria of the first-price auction of Bayesian models depend on the details of the prior probability distribution of private information. Besides, in most literature on the first-price auction, the symmetry of the prior distribution is assumed to compute symmetric equilibria. On the other hand, the equilibria of Proposition 2 do not depend on such details. In this sense, the equilibria of Proposition 2 are more robust than Bayesian Nash equilibria. This robustness is rather similar to that of ex-post Nash equilibrium, another equilibrium concept of incomplete information games.

To introduce ex-post Nash equilibrium, given a bid profile $b = (b_1, \dots, b_n)$, let $k(b)$ be the number of the maximal bids in b . The ex-post utility $U_i(b; w_i, d_i)$ when a bid profile is b , and firm i 's initial cash balance and proper cost are w_i and d_i , respectively is:

$$U_i(b; w_i, d_i) = \begin{cases} \Pi_i(w_i, d_i, b_i)/k(b) & \text{if } b_i = \max\{b_j : j = 1, \dots, n\} \\ 0 & \text{otherwise.} \end{cases}$$

DEFINITION: A bid function profile $b(\cdot, \cdot) = (b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ is an *ex-post Nash equilibrium* if for any initial cash balance profile $w = (w_1, \dots, w_n)$, any proper cost profile $d = (d_1, \dots, d_n)$, any firm i , and any its bid \hat{b}_i ,

$$U_i(b(w, d); w_i, d_i) \geq U_i(\hat{b}_i, b_{-i}(w_{-i}, d_{-i}); w_i, d_i).$$

The concept of ex-post Nash equilibrium is independent of the probability distribution of private information such as initial cash balances and proper costs. In other words, ex-post Nash equilibria are Bayesian Nash equilibria for any probability distribution of private information. Similarly, although Proposition 2 requires the assumption of a probability of one for the event that there are at least two firms whose initial cash balances are zero, the zero winning-bid profiles are the Bayesian Nash equilibria for any probability distribution of private information that satisfy these assumptions.

3.3. Equilibria behavior and hypothesis.

Summarizing the results in Subsections 3.1 and 3.2, we describe firms' behavior in the whole procurement process. A firm's behavior in the whole procurement process is described by a pair s_i of a bidding function $b_i(\cdot, \cdot)$ in Stage 1 and a spending function $c_i(\cdot, \cdot, \cdot)$ in Stage 2. We call $s_i = (b_i(\cdot, \cdot), c_i(\cdot, \cdot, \cdot))$ firm i 's strategy. We denote a strategy-profile by $s = (s_1, \dots, s_n)$. Perfect Bayesian Nash equilibrium is a standard equilibrium concept in dynamic incomplete information games. This equilibrium concept in the whole procurement process is defined as follows.

DEFINITION: A strategy profile $s = (s_1, \dots, s_n)$ is a *perfect Bayesian Nash equilibrium* if

- (i) for any firm i , $c_i(\cdot, \cdot, \cdot)$ is a optimal spending function in Stage 2, and
- (ii) $(b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ constitutes a Bayesian Nash equilibrium in Stage 1 for the expected profit functions E_i , $i = 1, \dots, n$, given by:

$$E_i(b_i, b_{-i}(\cdot, \cdot); w_i, d_i) = \Pi_i(w_i, d_i, b_i) \cdot \sum_{k=1}^n \Pr(X_{-i}^k; w_i, d_i)/k,$$

where $\Pi_i(w_i, d_i, b_i) = \pi_i(c_i(w_i, d_i, b_i))$.

Owing to Propositions 1 and 2, we have Proposition 3 below.

PROPOSITION 3: *Assume that there are at least two firms whose initial cash balances are zero with probability one. Then, A strategy profile $s = (s_1, \dots, s_n)$ is a perfect Bayesian Nash equilibrium if and only if*

- (i) *for any firm i , $c_i(\cdot, \cdot, \cdot)$ is given by :*

$$c_i(w_i, d_i, b_i) = \begin{cases} (b_i + w_i)/2 & \text{if } b_i + w_i \leq 2d_i - d_i/\sqrt{r} \\ (1 - 1/2r) \cdot d_i & \text{otherwise,} \end{cases}$$

and

- (ii) *$(b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ is a zero winning-bid profile.*

At any perfect Bayesian Nash equilibrium, the winner is always a firm with a zero initial cash balance, and the winning bid and the quality of the building constructed by the winner are always both zero.

Proposition 3 implies the following hypothesis:

Hypothesis 1: The winner in Stage 1 is a firm with zero initial cash balance.

Hypothesis 2: The winning bid in Stage 1 is zero.

Hypothesis 3: The winner's quality choice in Stage 2 is zero.

Hypothesis 4: The spending of firm i in Stage 2 is $(b_i + w_i)/2$ if $b_i + w_i \leq 2d_i - d_i/\sqrt{r}$.

Hypothesis 5: The spending of firm i in Stage 2 is $(1 - 1/2r) \cdot d_i$ if $b_i + w_i > 2d_i - d_i/\sqrt{r}$.

In the next section, we present experimental procedures to examine these hypothesis.

4. Experimental Procedures

The experiment was consisted of two sessions. It was programmed and conducted with the software z-Tree (Fischbacher, 2007). The subjects were undergraduate and graduate students from Osaka University. They were invited to sign up at the designated websites through flyers posted around campus and email solicitations sent to those students who had signed up for other experiments before. None of the subjects participated in more than one session.

Upon arrival, the subjects were seated at separate computer terminals, and no communication was permitted throughout the session. The subjects listened to prerecorded instructions, while simultaneously following the same from their own copies⁵. In the instructions, they were told that their roles were those of producers producing a good each and selling them to the experimenter⁶. The subjects were prohibited from asking any questions to verify their understanding of the examination procedures.

The top twenty subjects who passed the examination participated in the subsequent proceedings⁷. After we announced the correct answers to the subjects, the identification numbers of producers were determined by a lottery.

Each session consisted of 16 periods. At the beginning of each period, the subjects were automatically assigned into five groups, each comprising four subjects. Each subject received his ready reckoner of the all payoffs with respect to all his bids and spending levels. Each subject knew only his own initial cash balances and proper costs from that reckoner. We set initial cash balances, w_i , as 0, 0, 50, and 100, and the proper costs d_i , as 24, 30, 36, and 42 for each group. Throughout the 16 periods, every subject was assigned to all combinations of 4 initial cash balances and 4 proper costs, but the subjects were not informed of this. The subjects entered their proper costs and initial cash balances into their record sheets distributed along with the instructions. Apart from their own initial cash balances and proper costs, they are informed that each group has at least two producers whose initial cash balances were zero in the instruction.

In each group, the first-price auction was implemented. Subjects were allowed to enter their cost spendings and bids into the interface to calculate their profits and probabilities of corner-cutting being detected as many times as they desired before they made their final decisions. However, they decided their spending levels and bids simultaneously within 6 minutes. The subjects were not allowed to change their cost spending after the winner was decided. We mandated that their bids were no more than the ceiling price of 58 as we set, and that their spending did not exceed their proper costs. Further, spending was mandated to be no more than the sum of the bid and initial cash balance so as to avoid bankruptcy before the experimenter investigated the quality of the produced good.

⁵The instructions and PC operation manuals are provided in the supplementary material.

⁶We used "producers" instead of "firms" in the experiment.

⁷In each session, we invited more than 20 subjects including a few extra subjects in order to ensure the necessary number.

The penalty ratio, r , is 2. When the winner was detected to have cut corners, his final cash balance was equal to [his initial cash balance and bid] – [his cost spending and penalty] if he was able to pay the whole amount of penalty, and his final cash balance was zero if he was not. The winner’s profits were his final cash balance minus initial cash balance; those of other firms were zero.

After the winner was decided, each subject’s computer screen displayed whether or not he won, along with his own profits. The subjects then entered these results into their record sheets.

The subjects were paid their total experimental points in cash under the conversion rate of 1 point equal to 7 yen (8 cents)⁸. To cover the loss of the subjects, we added 40 points at the end of each period. Each session lasted roughly 3 hours. The average payments to subjects were 4,554 yen (\$50.6). None of them had negative total experimental points.

5. Experimental Results

First, we overview the experimental outcomes. Table 1 summarizes the means and standard errors of the winners’ quality choices, the winning bids, the winners’ spendings, winners’ relative bids (to the proper cost)⁹, and the ratio of the zero initial cash balance winners¹⁰. The ratio of the zero initial cash balance winners is more than 0.9 in each session. On average, the quality choice is less than 0.4, and winning bids and the relative bids are around 16.5 and 0.6, respectively. These results indicate that producers with zero initial cash balances win by bidding considerably lower than their proper costs and cut corners in large scale.

We compare the these outcomes between two sessions. The proportion test does not reject the null hypothesis of no difference in frequency of winning of producers with zero initial cash balance between two sessions (two-tailed p-value=0.468). In both sessions, winners are almost producers with zero initial cash balance. The quality choices are not significantly different between sessions in t-test (two-tailed p-value is 0.20) or Wilcoxon rank-sum test (two-tailed p-values is 0.17). Neither is the winning bids (two-tailed p-values of t-test and Wilcoxon rank-sum test are 0.35 and 0.52, respectively). In both sessions, winning bids are lower than the proper cost and winner’s quality choices are lower than the quality the auction authority require. To sum up, we conclude the following results.

RESULT 1. (a)The winners in the auction are firms with zero initial cash balance (support for Hypothesis 1).

(b) The average on winning bids are considerably lower than the proper costs.

(c) The average on winners’ quality choices are considerably lower than the quality the auction authority require.

Table 1 is around here.

⁸\$1 = 90 yen at the time of the experiment.

⁹It is calculated as (winning bid)/(winner’s proper cost).

¹⁰It is calculated as (the number of winners with zero initial cash balance)/(the numbers of observations).

Second, we analyze the dynamics of winning bids and winners' quality choices and re-consider Hypotheses 2 and 3. Although both winning bids and winners' quality choices are higher than the theoretical prediction of zero, the learnings of subjects in the laboratory may induce the theoretical prediction. By analyzing the dynamics of winning bids and winners' quality choices, we examine whether the learning effects of subjects induce the price/quality decreasing in the laboratory.

Figure 2 presents the winning bids and the Tobit regression lines of all the winning bids on the periods in each session and the total of the two sessions taken together. In each figure, circles and diamonds represent the winning bids of producers with zero initial cash balances and those with positive initial cash balances, respectively. All winning bids are less than 30. Winning bids are censored variables between 0 and the ceiling price of 58, and thus, we employ a Tobit regression of all winning bids on periods.

Table 2 summarizes the results of this regression. The coefficient on period is negative and significant at the 1% level in both sessions and in both taken together. According to the F-tests of the hypothesis of no differences in the intercepts and the coefficient of period across sessions, the two sessions are not significantly different (two-tailed p-values are 0.246). Therefore, we obtain the result below.

RESULT 2. The winning bids decrease as periods proceed.

Figure 2 and Table 2 are around here.

Figure 3, on the other hand, presents winners' quality choices and the Tobit regression lines of the quality choices on the periods in each session and the total of the two sessions taken together. The quality choices, however, are censored variables between 0 and 1; thus, we employ a Tobit regression of all quality choices on periods. Table 3 summarizes the results of this regression. The coefficient on period is negative and significant at the 1% level in both sessions and for the two sessions taken together. According to F-tests of the hypothesis of no differences in the intercepts and the coefficients of periods across the two sessions, the two sessions are not significantly different (two-tailed p-values are 0.212). Therefore, we obtain the result below.

RESULT 3. The winner's quality choices decrease as periods proceed.

Figure 3 and Table 3 are around here.

Third, we examine optimal spending behavior described in Hypothesis 4 and 5. Proposition 3 divides the domain of the optimal spending choice function into two subdomains, $b_i + w_i \leq 2d_i - d_i/\sqrt{r}$; otherwise. We analyze spending behavior in each subdomain.

Figure 4 shows the pooled cost spending on bids across all proper costs for winners and losers, and the Tobit regression line of all cost spending on all bids. The figure suggests

that the majority of subjects spent more than Hypothesis 4 predicts. To confirm this tendency, we employ a Tobit regression of cost spending on bids for each proper cost in the subdomain such that $b_i + w_i \leq 2d_i - d_i/\sqrt{r}$:

$$c_i = \alpha + \beta \cdot b_i, i = 1, \dots, 40$$

Note that spendings are censored variables between 0 and each subject's proper cost. There are only data of producers with zero initial cash balances in this region, that is, $w_i = 0$. Thus, Proposition 1 predicts $c_i = b_i/2$, that is, $\alpha = 0$ and $\beta = 1/2$. Table 4 summarizes the results of this regression for each proper cost. The coefficients β on bids are more than Hypothesis 4's prediction of 0.5. They are significant at the 1% level for proper costs 24, 30, and 42 and at the 5% level for 36. According to the F-test, the null hypothesis that $\alpha = 0$ and $\beta = 1/2$ is rejected. Therefore, we obtain the result below.

RESULT 4. If $b_i + w_i \leq 2d_i - d_i/\sqrt{r}$, the spending relative to the bids is higher than the theoretical prediction.

Table 4 and Figure 4 are around here.

Next, we employ a Tobit regression of cost spending on bids for each proper costs on the subdomain such that $b_i + w_i > 2d_i - d_i/\sqrt{r}$. In this region, Hypothesis 5 predicts $c_i = 3d_i/4$, that is, $\alpha = 3d_i/4$ for $d_i = 24, 32, 36, 42$ and $\beta = 0$ ¹¹. Thus, only proper costs affect spending, whereas bids do not. Table 5 summarizes the results of the regressions. The coefficient on bids is more than 0 for each proper cost. It is significant at less than the 5% for proportion costs 24 and 42 but marginally significant for 30 and 36. According to the F-test, the null hypothesis that $\alpha = 3d_i/4$ for $d_i = 24, 32, 36, 42$ and $\beta = 0$ is rejected. Therefore, the experimental results are significantly different from the theoretical prediction that $c_i = 3d_i/4$. However, since the adjusted R^2 value for each proper cost is extremely low, we conclude that their bids does not affect spending. In this region, since subjects rarely win, it is likely that they do not decide their spending sensitively.

From the viewpoint of the relation between spending and proper costs, we re-consider Hypothesis 5 such that $c_i = 3d_i/4$. Figure 5 shows the pooled cost spending on proper costs across all initial cash balances for winners and losers, and the Tobit regression line of all cost spending on proper costs. The figure shows that the majority of subjects spent more than Hypothesis 5 predicts. To confirm this trend, we employ a Tobit regression of cost spending on proper costs for each initial cash balance in the same subdomain as Table 5:

$$c_i = \alpha + \beta \cdot d_i, i = 1, \dots, 40$$

¹¹ α is 18, 22.5, 27, and 31.5 when the proper cost, d_i , is 24, 32, 36, and 42, respectively.

We set right-censored values as 42. Table 6 displays the results of this regression. The coefficients on proper costs are higher than Proposition 1’s prediction of 0.75 and significant at the 1% level for each initial cash balance of 50 and 100. According to the F-test, the experimental result for each initial cash balance is also significantly different from the theoretical prediction that $c_i = 3d_i/4$, that is, $\alpha = 0$ and $\beta = 3/4$. To sum up, we obtain the result below.

RESULT 5. If $b_i + w_i > 2d_i - d_i/\sqrt{r}$,

- (a) the bids do not affect spending and
- (b) the spending relative to the proper cost is higher than the theoretical predictions.

Tables 5 and 6, and Figure 5 are around here.

6. Conclusions

In this paper, we analyze corner-cutting by firms who participate in procurement auctions. Theoretically, in the first-price procurement auction, if there are at least two firms with zero initial cash balances, then in Bayesian Nash equilibria, the firms with zero initial cash balances win, and the winning bids and winners’ quality choices are both zero. In the laboratory, we find that (i) the winners are firms with zero initial cash balances, (ii) their quality choices are considerably less than 1 and decrease as the periods proceed, and (iii) the winning bids are also considerably less than winners’ proper costs and decrease as the periods proceed. We conclude from these findings that firms with zero initial cash balances win by bidding lower than their proper costs, and cut corner in considerable scale.

Although our experimental results do not reach the Bayesian Nash equilibrium outcome where winning bids and winners’ quality choices are both zero, the winner’s quality choice and winning bids decrease toward the equilibrium outcomes of zero. These findings are similar to Dufwenberg and Gneezy (2002), and Dufwenberg and Gneezy (2004), who conducted the first-price procurement auction experiments of the environment where costs are same and are common knowledge, and find that winning bids converge to the Nash equilibrium outcomes as the periods proceed.

Proposition 1 assumes the risk neutrality of firms and predicts their cost spending and quality choices. The laboratory results, however, show that the cost spending is higher than the theoretical predictions of Proposition 1. Subjects’ risk aversion is likely to cause overspending¹² although more experiments are needed to confirm this conjecture. Moral behavior may be also a factor that causes this phenomenon.

This paper is a first step toward analyzing corner-cutting behavior in procurement auctions. As we pointed out in the introduction, auction authorities prescribe special rules to prevent corner-cutting, such as setting minimum prices in order to exclude the abnormally low bids and stipulating the necessary levels of initial cash balances for firms. Although our findings suggest that firms cut corners to a considerable scale if no such regulation exists, the effects of these regulations are yet to be assessed. Thus, a next step

¹²See Appendix C for the effect of risk averse attitude.

is to evaluate these regulations. Our ultimate goal would be to design a regulation that maximizes social benefits in models where firms cut corners.

Acknowledgements

This research was supported by the Japanese Ministry of Education, Culture, Sports, Science and Technology (the COE program of Behavioral Macrodynamics based on Surveys and Experiments; the Grant-in-Aid for Scientific Research on Priority Areas). We wish to acknowledge the helpful comments and suggestions of Ryuji Kutsuzawa, Kazuo Ogawa, Kosuke Oya, and participants at the Far East and South Asia Meeting of the Econometric Society and the meeting of the Society for Social Choice at Montreal and Welfare, and at the seminar at Kyoto University. We also thank Keiko Aoki, Takanori Kudo, and Kenta Onoshiro for assistance conducting the experiment.

References

- Brosig, J., Reiß, J. P., 2007. Entry decisions and bidding behavior in sequential first-price procurement auctions: An experimental study *Games and Economic Behavior* 58, 50-74.
- Calveras, A., Ganuza, J., Hauk, E., 2004. Wild Bids. Gambling for resurrection in procurement contracts. *Journal of Regulatory Economics* 26, 41-68.
- Che, Y. K., 1993. Design competition through multidimensional auctions. *The RAND Journal of Economics* 24, 668-680.
- Cox, J. C., Isaac, R. M., Cech, P., Conn, D., 1996. Moral hazard and adverse selection in procurement contracting. *Games and Economic Behavior* 17, 147-176.
- Dasgupta, S., Spulber, D., 1990. Managing Procurement Auctions *Information Economics and Policy* 4, 5-29.
- Dufwenberg, M., Gneezy, U., 2000. Price competition and market concentration: an experimental study. *International Journal of Industrial Organization* 18, 7-22.
- Dufwenberg, M., Gneezy, U., 2002. Information disclosure in auctions: an experiment. *Journal of Economic Behavior and Organization* 48, 431-444.
- Fischbacher, U., 2007. z-Tree: Zurich Toolbox for ready-made economic experiments, *Experimental Economics* 10, 171-178.
- Ganuza, J. J., 2007. Competition and cost overruns in procurement. *The Journal of Industrial Economics* 55, 633-660.
- Manelli, A. M., Vincent, D. R., 1995. Optimal procurement mechanisms. *Econometrica* 63, 591-620.
- Naegelen, F., 2002. Implementing optimal procurement auctions with exogenous quality. *Review of Economic Design* 7, 135-153.
- Sinclair-Desgagne B., 1990. On the regulation of procurement bids, *Economics Letters* 33, 229-232.
- Von Ungern-Sternberg, T., 1994. Quality incentives in auctions for construction contracts. *International Journal of Industrial Organization* 12, 89-104.

Web references

The European Commission, 1999. Prevention, detection and elimination of abnormally low tenders in the European construction industry.
URL: <http://ec.europa.eu/enterprise/construction/alo/altfin.htm>.

The Ministry of Internal Affairs and Communications in Japan, 2007 (in Japanese).

URL: http://www.soumu.go.jp/s-news/2007/pdf/070223_6_bs.pdf.

The Ministry of Land, Infrastructure, Transport and Tourism, 2006 (in Japanese).
URL: <http://www.mlit.go.jp/singikai/kensetsugyou/tekiseika/050513/06.pdf>.

The Ministry of Land, Infrastructure, Transport and Tourism, 2007 (in Japanese).
URL: http://www.mlit.go.jp/kisha/kisha07/01/011219_.html.

Fountain, H. January 13, 2010. Flawed Building Likely a Big Element. The New York Times. Com.

URL: <http://www.nytimes.com/2010/01/14/world/americas/14construction.html>.

Appendix A.

PROOF OF PROPOSITION 1: First, we compute the maximizer c^* of $E\pi$ on the two subdomains: Subdomain 1: $\{c \geq \bar{c}\}$ and Subdomain 2: $\{c \leq \bar{c}\}$.

Subdomain 1: On this subdomain, since $b - c - r \cdot (d - c) \geq -w$,

$$\begin{aligned} E\pi(c) &= \frac{c}{d} \cdot (b - c) + \frac{d - c}{d} \cdot \{b - c - r \cdot (d - c)\} \\ &= -\frac{r}{d} \cdot \left[c - \frac{2r - 1}{2r} \cdot d \right]^2 + b - d + \frac{d}{4r} \end{aligned}$$

At the singular point $c_1 = \frac{2r-1}{2r} \cdot d$ of this quadratic function, we have: $E\pi(c_1) = b - d + \frac{d}{4r}$. Note that

$$c_1 \begin{matrix} \geq \\ \leq \end{matrix} \bar{c} \Leftrightarrow \frac{2r-1}{2r} \cdot d - \left(\frac{r}{r-1} \cdot d - \frac{b+w}{r-1} \right) \begin{matrix} \geq \\ \leq \end{matrix} 0 \Leftrightarrow b \begin{matrix} \geq \\ \leq \end{matrix} \frac{3r-1}{2r} \cdot d - w.$$

Therefore, by letting $b_1 \equiv \frac{3r-1}{2r} \cdot d - w$, we have:

$$\arg \max\{\pi(c) : c \geq \bar{c}\} = \begin{cases} c_1 = \frac{2r-1}{2r} \cdot d & \text{if } b \geq b_1 \\ \bar{c} & \text{otherwise,} \end{cases}$$

$$\max\{\pi(c) : c \geq \bar{c}\} = \begin{cases} b - d + \frac{d}{4r} & \text{if } b \geq b_1 \\ -\frac{r}{d} \cdot \left[\bar{c} - \frac{2r-1}{2r} \cdot d \right]^2 + b - d + \frac{d}{4r} & \text{otherwise.} \end{cases}$$

Subdomain 2: On this subdomain, since $b - c - r \cdot (d - c) \leq -w$,

$$\begin{aligned} E\pi(c) &= \frac{c}{d} \cdot (b - c) - \frac{d - c}{d} \cdot w \\ &= -\frac{1}{d} \left[c - \frac{b+w}{2} \right]^2 + \frac{1}{4d} \cdot [(b+w)^2 - 4dw]. \end{aligned}$$

At the singular point $c_2 = \frac{b+w}{2}$ of this quadratic function, we have: $E\pi(c_2) = \frac{1}{4d} \cdot [(b+w)^2 - 4dw]$. Note that

$$c_2 \begin{matrix} \geq \\ \leq \end{matrix} \bar{c} \Leftrightarrow \frac{b+w}{2} - \left(\frac{r}{r-1} \cdot d - \frac{b+w}{r-1} \right) \begin{matrix} \geq \\ \leq \end{matrix} 0 \Leftrightarrow b \begin{matrix} \geq \\ \leq \end{matrix} \frac{2r}{r+1} \cdot d - w.$$

Therefore, by letting $b_2 \equiv \frac{2r}{r+1} \cdot d - w$, we have:

$$\arg \max\{E\pi(c) : c \leq \bar{c}\} = \begin{cases} c_2 & \text{if } b \leq b_2 \\ \bar{c} & \text{otherwise,} \end{cases}$$

$$\max\{E\pi(c) : c \leq \bar{c}\} = \begin{cases} \frac{1}{4d} \cdot [(b+w)^2 - 4dw] & \text{if } b \leq b_2 \\ \frac{\bar{c}}{d} \cdot (b-c) - \frac{d-\bar{c}}{d} \cdot w & \text{otherwise.} \end{cases}$$

Further, note that

$$b_2 - b_1 = \left(\frac{2r}{r+1} \cdot d - w\right) - \left(\frac{3r-1}{2r} \cdot d - w\right) = \frac{(r-1)^2}{2r(r+1)} \cdot d.$$

Thus, by $r > 1$ and $d > 0$, $b_2 > b_1$. This implies that we have, Case A: $b \leq b_1 < b_2$, Case B: $b_1 < b < b_2$, or Case C: $b_1 < b_2 \leq b$. In the following, we compute the maximizer of π in each case.

Case A: Since $c_1 < \bar{c}$ and $c_2 \leq \bar{c}$ holds, $\max E\pi(c) = \pi(c_2) = \frac{1}{4d} \cdot [(b+w)^2 - 4dw]$.

Case B: Since $c_2 < \bar{c} < c_1$ holds, $\max \pi(c) = \pi(c_1) = b - d + \frac{d}{4r}$ or $\max E\pi(c) = \pi(c_2) = \frac{1}{4d} \cdot [(b+w)^2 - 4dw]$.

We need to compute which of $E\pi(c_1)$ or $E\pi(c_2)$ is bigger. Note that

$$E\pi(c_1) - E\pi(c_2) = \frac{1}{4}d^{-1} \cdot \left(4bd - 2bw + 4dw - b^2 - 4d^2 - w^2 + \frac{d^2}{r}\right).$$

Thus, by $d > 0$,

$$\pi(c_1) \gtrless \pi(c_2) \Leftrightarrow 4bd - 2bw + 4dw - b^2 - 4d^2 - w^2 + \frac{d^2}{r} \gtrless 0.$$

In addition, note that

$$4bd - 2bw + 4dw - b^2 - 4d^2 - w^2 + \frac{d^2}{r} = -(b - (2d - w))^2 + \frac{d^2}{r}.$$

The solution of the equation $-(b - (2d - w))^2 + \frac{d^2}{r} = 0$ is $b = (2d - w) \pm \frac{d}{\sqrt{r}}$. Thus,

$$4bd - 2bw + 4dw - b^2 - 4d^2 - w^2 + \frac{d^2}{r} \geq 0 \Leftrightarrow 2d - w - \frac{d}{\sqrt{r}} \leq b \leq 2d - w + \frac{d}{\sqrt{r}}.$$

Therefore, we have:

$$E\pi(c_1) \geq E\pi(c_2) \Leftrightarrow 2d - w - \frac{d}{\sqrt{r}} \leq b \leq 2d - w + \frac{d}{\sqrt{r}}.$$

Note that

$$\left(2 \cdot d - w + \frac{d}{\sqrt{r}}\right) - b_2 = d \cdot \left(\frac{1}{\sqrt{r}} - 2\frac{r}{r+1} + 2\right).$$

Then, by $d > 0$,

$$2 \cdot d - w + \frac{d}{\sqrt{r}} \geq b_2 \Leftrightarrow \frac{1}{\sqrt{r}} - 2\frac{r}{r+1} + 2 \geq 0.$$

By $r > 1$, $\frac{1}{\sqrt{r}} - 2\frac{r}{r+1} + 2 > 0$, and so $b_2 < 2d - w + \frac{d}{\sqrt{r}}$ holds. Further note that

$$\left(2d - w - \frac{d}{\sqrt{r}}\right) - b_1 = \frac{d}{2r} \cdot (\sqrt{r} - 1)^2 > 0.$$

Thus, $2d - w - \frac{d}{\sqrt{r}} \geq b_1$. Further,

$$b_2 - \left(2d - w - \frac{d}{\sqrt{r}}\right) = \frac{d}{(r+1)\sqrt{r}} \cdot (r - 2\sqrt{r} + 1).$$

By $d > 0$ and $r > 1$,

$$b_2 \geq 2d - w - \frac{d}{\sqrt{r}} \Leftrightarrow r - 2\sqrt{r} + 1 \geq 0.$$

By $r > 1$, $\frac{d}{dr}(r - 2\sqrt{r} + 1) = 1 - \frac{1}{\sqrt{r}} > 0$. Thus, since, $r - 2\sqrt{r} + 1 = 0$ at $r = 1$, $b_2 > 2d - w - \frac{d}{\sqrt{r}}$. Accordingly, we have:

$$b_1 < 2d - w - \frac{d}{\sqrt{r}} < b_2 < 2d - w + \frac{d}{\sqrt{r}}.$$

This implies that in Case B, we have:

$$E\pi(c_1) \geq E\pi(c_2) \Leftrightarrow 2d - w - \frac{d}{\sqrt{r}} \leq b.$$

Therefore,

$$\max E\pi(c) = \begin{cases} E\pi(c_2) = \frac{1}{4d} \cdot [(b+w)^2 - 4dw] & \text{if } b \leq 2d - w - \frac{d}{\sqrt{r}} \\ E\pi(c_1) = b - d + \frac{d}{4r} & \text{otherwise.} \end{cases}$$

Case C: Since $c_2 \geq \bar{c}$ and $c_1 > \bar{c}$ holds, $\max E\pi(c) = E\pi(c^*) = b - d + \frac{d}{4r}$.

QED

Appendix B.

In this appendix, we prove that in Stage 1 of the procurement process, any Bayesian Nash equilibrium is a zero winning bid profile. Let the bid function profile $b(\cdot, \cdot) = (b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ be a Bayesian Nash equilibrium.

STEP1: We show that the winning bid of $b(w, d)$ is zero for any (w, d) . Suppose that for some $(w, d) \in W^* \times D$, the winning bid $\bar{b} \equiv \min\{b_j(w_j, d_j) : j \in N\} > 0$. We derive a contradiction. Note that by Lemma 1, $\Pi(w_i, d_i, \bar{b}) > 0$ for firm i with $w_i = 0$.

Suppose that $b_i(w_i, d_i) > \bar{b}$ for some firm i with $w_i = 0$. Then, since $\Pr(\text{firm } i \text{ wins at } b(w, d)) = 0$, $E(b_i(w_i, d_i), b_{-i}(\cdot, \cdot); w_i, d_i) = 0$. However, by bidding \bar{b} firm i can win with positive probability, and then $\Pi(w_i, d_i, \bar{b}) > 0$ implies that firm i can obtain a positive expected payoff. This contradicts $E(b_i(w_i, d_i), b_{-i}(\cdot, \cdot); w_i, d_i) = 0$ since $b(\cdot, \cdot) = (b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ is a Bayesian Nash equilibrium. Thus, $b_i(w_i, d_i) = \bar{b}$ for any firm i with $w_i = 0$. Since there are several firms with zero initial cash balances, there is a firm i such that $w_i = 0$ and $\Pr(\text{firm } i \text{ wins at } b(w, d)) \leq 1/2$.

Since $\Pr(\text{firm } i \text{ wins at } b(w, d)) \leq 1/2$, we have $E(b_i(w_i, d_i), b_{-i}(\cdot, \cdot); w_i, d_i) \leq \Pi(w_i, d_i, \bar{b})/2$.

Note that

$$\begin{aligned}
& \Pr(\text{firm } i \text{ wins by bidding } b_i : w_i, d_i) \\
&= \sum_{b_{-i}} \Pr(\text{firm } i \text{ wins at } (b_i, b_{-i})) \cdot \Pr(b_{-i} : w_i, d_i) \\
&= \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i})} \Pr(\text{firm } i \text{ wins at } (b_i, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i) \\
&= \Pr(\text{firm } i \text{ wins at } (b_i, b_{-i}(w_{-i}, d_{-i}))) \cdot \Pr(w_{-i}, d_{-i} : w_i, d_i) \\
&+ \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i}) \neq (w_{-i}, d_{-i})} \Pr(\text{firm } i \text{ wins at } (b_i, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i)
\end{aligned}$$

Further, for all $\epsilon > 0$ and all $(\widehat{w}_{-i}, \widehat{d}_{-i})$,

$$\Pr(\text{firm } i \text{ wins at } (\bar{b} - \epsilon, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \geq \Pr(\text{firm } i \text{ wins at } (\bar{b}, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))).$$

Therefore, for all $\epsilon > 0$,

$$\begin{aligned}
& \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i}) \neq (w_{-i}, d_{-i})} \Pr(\text{firm } i \text{ wins at } (\bar{b} - \epsilon, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i) \\
&\geq \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i}) \neq (w_{-i}, d_{-i})} \Pr(\text{firm } i \text{ wins at } (\bar{b}, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i).
\end{aligned}$$

Since $\bar{b} \equiv \min\{b_j(w_j, d_j) : j \in N\}$, $\Pr(\text{firm } i \text{ wins at } (\bar{b} - \epsilon, b_{-i}(w_{-i}, d_{-i}))) = 1$ for all $\epsilon > 0$. Thus, since $\Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i) > 0$ for all $(\widehat{w}_{-i}, \widehat{d}_{-i})$, given $\epsilon > 0$,

$$\begin{aligned}
& \Pr(\text{firm } i \text{ wins by bidding } \bar{b} - \epsilon : w_i, d_i) \\
&= \Pr(w_{-i}, d_{-i} : w_i, d_i) \\
&+ \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i}) \neq (w_{-i}, d_{-i})} \Pr(\text{firm } i \text{ wins at } (\bar{b} - \epsilon, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i),
\end{aligned}$$

and

$$\begin{aligned}
& \lim_{\epsilon \rightarrow +0} \Pr(\text{firm } i \text{ wins by bidding } \bar{b} - \epsilon : w_i, d_i) \\
&\geq \Pr(w_{-i}, d_{-i} : w_i, d_i) \\
&+ \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i}) \neq (w_{-i}, d_{-i})} \Pr(\text{firm } i \text{ wins at } (\bar{b}, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i) \\
&> (1/2) \cdot \Pr(w_{-i}, d_{-i} : w_i, d_i) \\
&+ \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i}) \neq (w_{-i}, d_{-i})} \Pr(\text{firm } i \text{ wins at } (\bar{b}, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i) \\
&\geq \Pr(\text{firm } i \text{ wins at } (\bar{b}, b_{-i}(w_{-i}, d_{-i}))) \cdot \Pr(w_{-i}, d_{-i} : w_i, d_i) \\
&+ \sum_{(\widehat{w}_{-i}, \widehat{d}_{-i}) \neq (w_{-i}, d_{-i})} \Pr(\text{firm } i \text{ wins at } (\bar{b}, b_{-i}(\widehat{w}_{-i}, \widehat{d}_{-i}))) \cdot \Pr(\widehat{w}_{-i}, \widehat{d}_{-i} : w_i, d_i) \\
&= \Pr(\text{firm } i \text{ wins by bidding } \bar{b} : w_i, d_i).
\end{aligned}$$

Since by Proposition 1, $\Pi(w_i, d_i, b_i)$ is continuous with respect to b_i , and $\Pi(w_i, d_i, \bar{b}) > 0$, it follows that for small $\epsilon > 0$,

$$\begin{aligned} & E(\bar{b} - \epsilon, b_{-i}(\cdot, \cdot); w_i, d_i) \\ &= \Pr(\text{firm } i \text{ wins by bidding } \bar{b} - \epsilon : w_i, d_i) \cdot \Pi(w_i, d_i, \bar{b} - \epsilon) \\ &> \Pr(\text{firm } i \text{ wins by bidding } \bar{b} : w_i, d_i) \cdot \Pi(w_i, d_i, \bar{b}) \\ &= E(b_i(w_i, d_i), b_{-i}(\cdot, \cdot); w_i, d_i). \end{aligned}$$

This is a contradiction since $b(\cdot, \cdot) = (b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ is a Bayesian Nash equilibrium.

STEP 2: Now we prove that $b(\cdot, \cdot) = (b_1(\cdot, \cdot), \dots, b_n(\cdot, \cdot))$ is a zero winning bid profile. Let (w, d) be given.

If a firm with positive cash balance bids zero amount, then it wins with a positive probability and its conditional expected profit is negative. This contradicts the equilibrium condition since it obtains zero expected profit by bidding positive amount. Thus, a firm with a positive cash balance at (w, d) bids a positive amount.

Since the winning bid of $b(w, d)$ is zero, there is at least one firm i with zero initial cash balance who bids zero amount. If no other firm bids zero, then firm i can obtain a positive conditional expected profit by bidding an amount slightly higher than zero. This contradicts the equilibrium condition since firm i obtains zero conditional expected profit by bidding $b_i(w_i, d_i)$. Therefore, there are at least two firms with zero initial cash balance who bid zero amount.

Hence, $b(\cdot, \cdot)$ is a zero winning bid profile.

QED

Appendix C.

To see the effect of risk averse attitude, define the twice differentiable utility function $u : \mathbb{R} \rightarrow \mathbb{R}$ such that $u' > 0$ and $u'' < 0$. Then, the expected utility $Eu(\pi)$ of profit is:

$$Eu(\pi) = \frac{c}{d} \cdot u(b - c) + \frac{d - c}{d} \cdot u(\max\{b - c - r \cdot (d - c), -w\}).$$

First consider the domain such that $b < \bar{b} = 2d - w - d/\sqrt{r}$. Then,

$$Eu(\pi) = \frac{c}{d} \cdot u(b - c) + \frac{d - c}{d} \cdot u(-w).$$

Taking the derivative of Eu with respect to c gives:

$$\frac{dEu(\pi)}{dc} = \frac{1}{d} \cdot u(b - c) - \frac{c}{d} \cdot u'(b - c) - \frac{1}{d} \cdot u(-w).$$

At $c^* = (b + w)/2$, by Taylor,

$$\begin{aligned} \frac{dEu(\pi)}{dc} &= \frac{1}{d} \cdot u\left(\frac{b - w}{2}\right) - \frac{c^*}{d} \cdot u'\left(\frac{b - w}{2}\right) - \frac{1}{d} \cdot u\left(\frac{b - w}{2} - c^*\right) \\ &= \frac{1}{d} \cdot u\left(\frac{b - w}{2}\right) - \frac{c^*}{d} \cdot u'\left(\frac{b - w}{2}\right) \\ &\quad - \frac{1}{d} \left\{ u\left(\frac{b - w}{2}\right) - c^* \cdot u'\left(\frac{b - w}{2}\right) + \frac{c^{*2}}{2} \cdot u''(\tilde{c}) \right\} \\ &= -\frac{c^{*2}}{2} \cdot u''(\tilde{c}), \end{aligned}$$

where $\tilde{c} \in (\frac{b-w}{2} - c^*, \frac{b-w}{2})$. Thus, on the domain such that $b < \bar{b} = 2d - w - d/\sqrt{r}$, at $c^* = (b+w)/2$, $dEu(\pi)/dc > 0$. This implies that the spending level maximizing the expected utility is greater than $c^* = (b+w)/2$, the level Proposition 1 predicts.

Next consider the domain such that $b > \bar{b} = 2d - w - d/\sqrt{r}$. Then,

$$Eu(\pi) = \frac{c}{d} \cdot u(b-c) + \frac{d-c}{d} \cdot u(b-c-r \cdot (d-c)).$$

Taking the derivative of Eu with respect to c gives:

$$\begin{aligned} \frac{dEu(\pi)}{dc} &= \frac{1}{d} \cdot u(b-c) - \frac{c}{d} \cdot u'(b-c) - \frac{1}{d} \cdot u(b-c-r \cdot (d-c)) \\ &\quad + \frac{d-c}{d} \cdot u'(b-c-r \cdot (d-c)). \end{aligned}$$

At $c^* = (1 - 1/2r) \cdot d$, by Taylor and $r = 2$,

$$\begin{aligned} \frac{dEu(\pi)}{dc} &= \frac{1}{d} \cdot u(b-c^*) - \frac{c^*}{d} \cdot u'(b-c^*) - \frac{1}{d} \cdot u(b-c^* - \frac{d}{2}) \\ &\quad + \frac{1}{2r} \cdot u'(b-c^* - \frac{d}{2}) \\ &= \frac{1}{d} \cdot u(b-c^*) - \frac{2r-1}{2r} \cdot u'(b-c^*) \\ &\quad - \frac{1}{d} \left\{ u(b-c^*) - \frac{d}{2} \cdot u'(b-c^*) + \frac{d}{8} \cdot u''(\tilde{c}_1) \right\} \\ &\quad + \frac{1}{2r} \left\{ u'(b-c^*) - \frac{d}{2} \cdot u''(\tilde{c}_2) \right\} \\ &= -\frac{1}{8} \cdot u''(\tilde{c}_1) - \frac{d^2}{4r} \cdot u''(\tilde{c}_2), \end{aligned}$$

where $\tilde{c}_1, \tilde{c}_2 \in (b-c^* - \frac{d}{2}, b-c^*)$. Thus, on the domain such that $b > \bar{b} = 2d - w - d/\sqrt{r}$, at $c^* = (1 - 1/2r) \cdot d$, $dEu(\pi)/dc > 0$. This implies that the spending level maximizing the expected utility is greater than $c^* = (1 - 1/2r) \cdot d$, the level Proposition 1 predicts.

Table 1. Statistical summary of the winners' actions

Session	Bids	Quality choices	Spending	Relative bids	Ratio of zero initial cash balance winners	No. of obs.
1	16.20 (0.49)	0.37 (0.02)	10.45 (0.45)	0.56(0.02)	0.94	80
2	16.84 (0.47)	0.33 (0.02)	9.93 (0.52)	0.57(0.02)	0.96	80
Total	16.52 (0.34)	0.35 (0.01)	10.19 (0.34)	0.57(0.02)	0.95	160

Table 2. Tobit regression of winning bids on periods

Session	Intercept	Period	Adjusted R ²	No. of obs.	# Left-censored	# Right-censored
1	21.34*** (0.84)	-0.60*** (0.08)	0.41	80	0	0
2	20.77*** (0.84)	-0.46*** (0.09)	0.25	80	0	0
Total	21.06*** (0.57)	-0.53*** (0.06)	0.33	160	0	0

Note: Standard errors are in parentheses. Adjusted R² values are obtained using OLS regression. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table 3. Tobit regression of winners' quality choices on periods

Session	Intercept	Period	Adjusted R ²	No. of obs.	# Left-censored	# Right-censored
1	0.51*** (0.03)	-0.02*** (0.00)	0.22	80	0	0
2	0.43*** (0.04)	-0.01*** (0.00)	0.09	80	0	0
Total	0.47*** (0.03)	-0.01*** (0.00)	0.15	160	0	0

Note: Standard errors are in parentheses. Adjusted R² values are obtained using OLS regression. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table 4. Tobit regression of spending on bids if $b_i + w_i \leq 2d_i - d_i / \sqrt{r}$

Proper cost	Intercept	Bid	F-statistics ($\alpha = 0, \beta = 0.5$)	Adjusted R ²	No. of obs.	# Left-censored	# Right-censored
24	-0.78 (1.19)	0.62*** (0.07)	8.69***	0.49	78	0	0
30	-1.61 (1.55)	0.72*** (0.08)	26.87***	0.51	80	0	1
36	-0.74 (1.19)	0.71** (0.05)	54.62***	0.67	80	0	0
42	-4.27*** (1.30)	0.87*** (0.06)	58.00***	0.72	80	0	0
Total	-2.57***(0.63)	0.77***(0.03)	144.4***	0.66	318	0	0

Note: Standard errors are in parentheses. Adjusted R² values are obtained using OLS regression. The right-censored value in Total is 42. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table 5. Tobit regression of spending on bids if $b_i + w_i > 2d_i - d_i / \sqrt{r}$

Proper cost	Intercept	Bid	F-statistics ($\alpha = 3d/4, \beta = 0$)	Adjusted R ²	No. of obs.	# Left-censored	# Right-censored
24	13.18***(1.84)	0.23***(0.07)	10.09***	0.08	82	0	10
30	19.25***(2.51)	0.15*(0.07)	6.05***	0.01	80	0	8
36	24.58***(3.57)	0.14*(0.09)	8.69***	0.00	80	0	11
42	24.28***(5.93)	0.28**(0.13)	17.26***	0.04	80	0	19

Note: Standard errors are in parentheses. Adjusted R² values are obtained using OLS regression. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table 6. Relation between spending and proper costs if $b_i + w_i > 2d_i - d_i / \sqrt{r}$

Initial cash balance	Intercept	proper cost	F-statistics ($\alpha = 0, \beta = 3d/4$)	Adjusted R ²	No. of obs.	# Left-censored	# Right-censored
50	-3.26 (2.07)	0.91*** (0.06)	17.92***	0.58	160	0	11
100	-4.30* (2.20)	0.95*** (0.07)	19.16***	0.55	160	0	8
Total	-3.85** (1.57)	0.94*** (0.05)	36.76***	0.57	322	0	19

Note: Standard errors are in parentheses. Adjusted R² values are obtained using OLS regression. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. When the initial cash balance is zero, there are two observations. Therefore, the total number of observation includes these two observations.

Figure 1. Optimal cost spending and maximal expected payoff

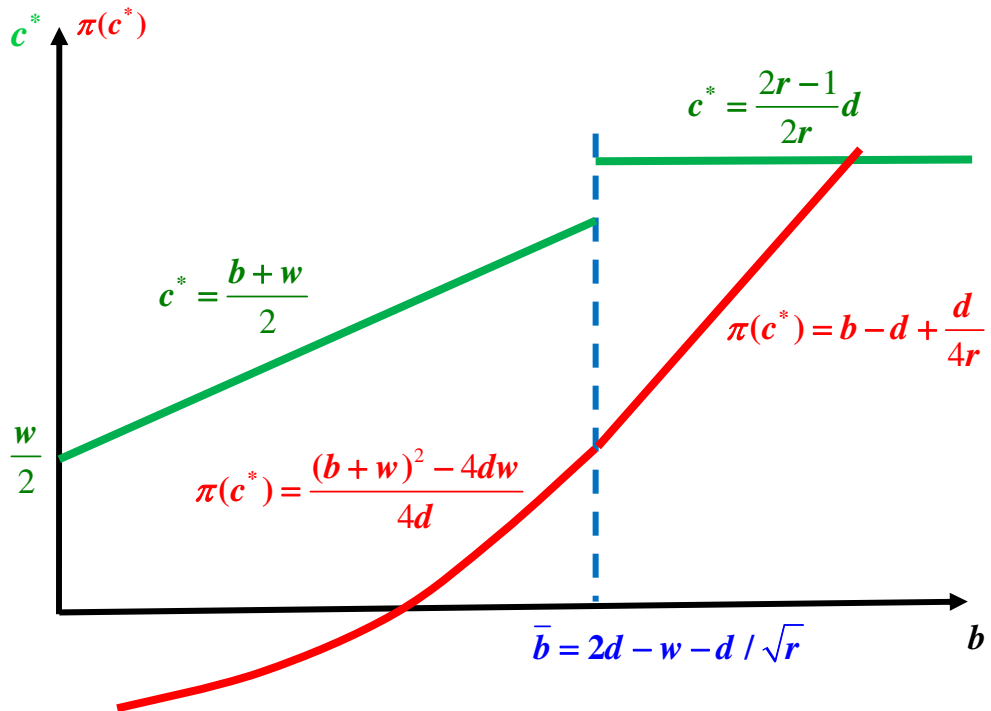


Figure 2. Winning bids

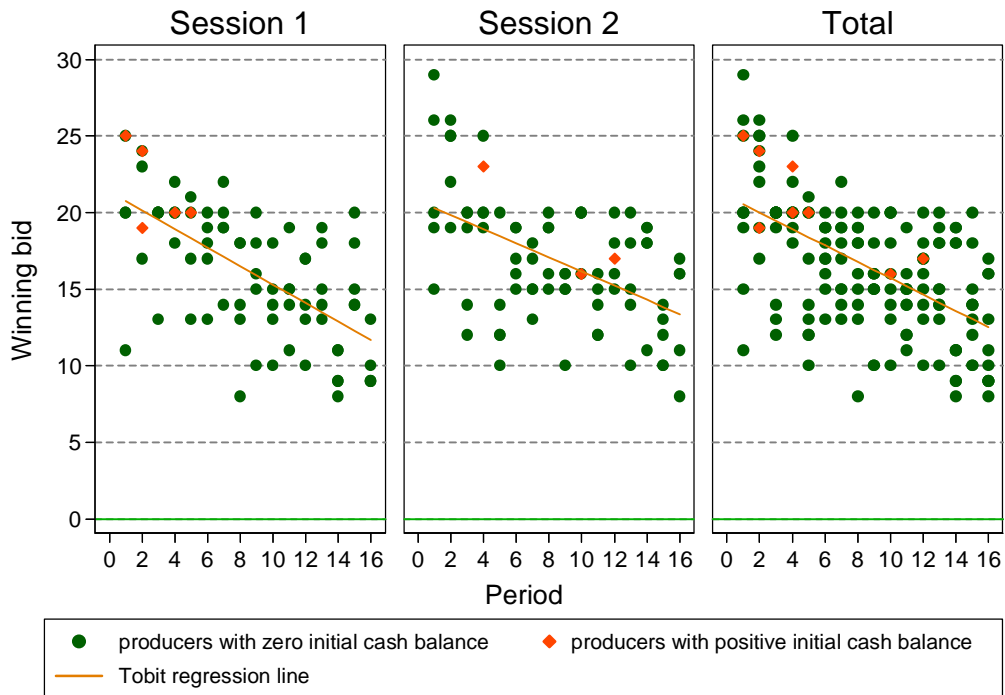


Figure 3. Winner's quality choices

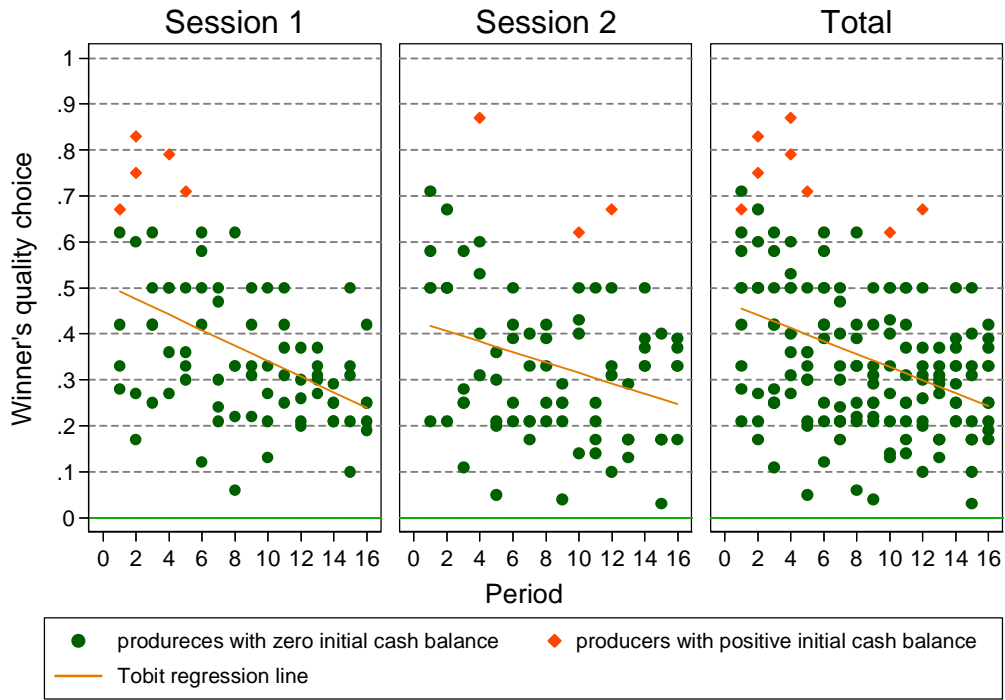


Figure 4. Tobit regression of spending on bids

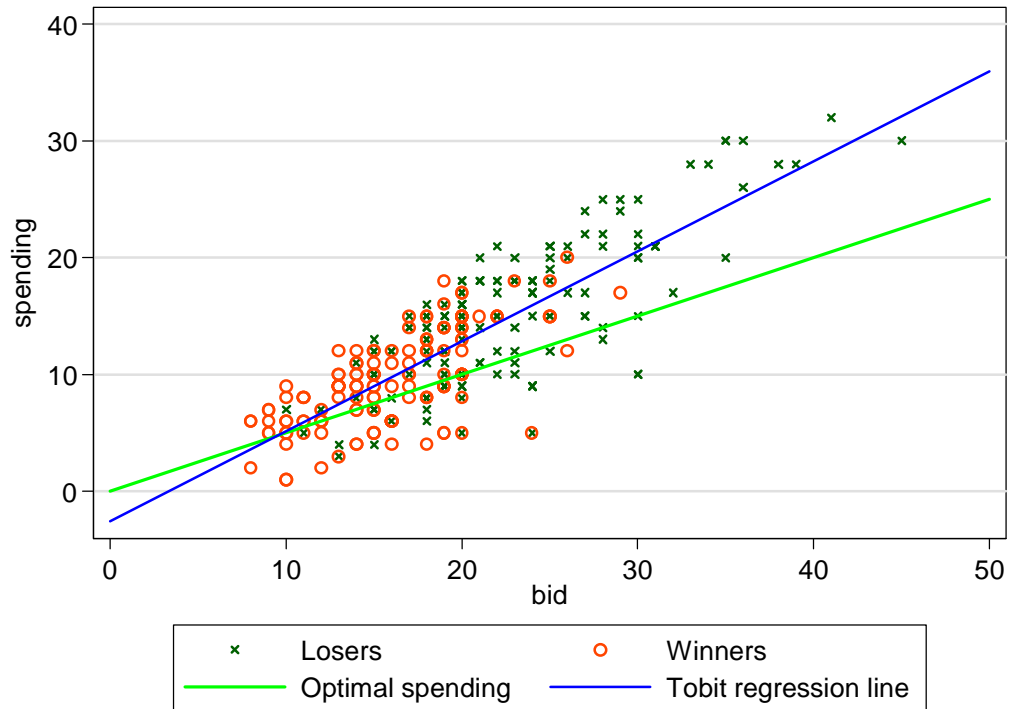
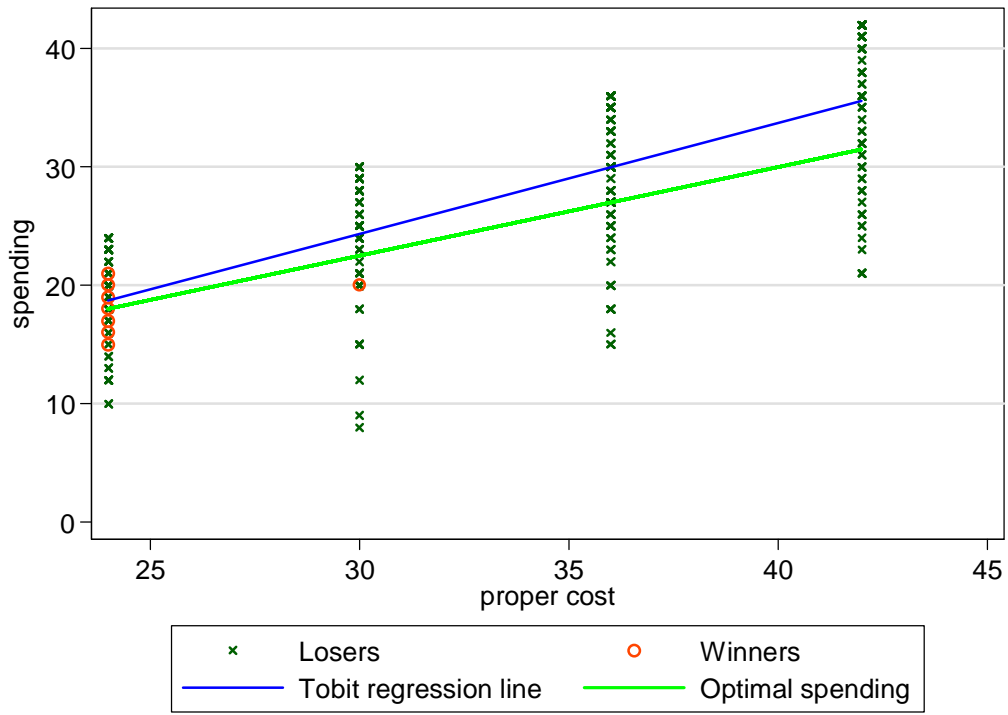


Figure 5. Tobit regression of spending on proper costs



Supplementary Material for "Auctions for Public Construction with Corner-cutting"

Here, we provide materials used in the experiment. Section 1 provides instructions and the outline of the experiment. Section 2 provides PC operation manuals with captured screens of z-Tree and the record sheet for subjects to learn how to operate z-Tree and to read payoff tables. Section 3 provide the examination and it's answer for choosing subject who can join the actual session. Section 4 provides payoff tables for the practice and actual experiment. The payoff tables for the practice were distributed along with the PC operation manuals and the record sheet. The payoff tables for the actual session were private information. Each table is consisted of two pages. Section 5 summarizes raw data of the experiment.

1. Instructions and the outline of the experiment

Instructions

1. Abstract of the experiment

In this experiment, every subject is assigned the role of a producer and makes decisions in producing virtual goods and selling them to the experimenter. The experiment is conducted using computers assigned to each subject. Please make sure you understand the rules of the experiment well and make appropriate decisions to earn as many rewards as possible.

2. Outline of the experiment

The number of subjects participating in this experiment is 20 in total. Every subject is assigned the role of a producer and makes decisions in producing virtual goods and selling them to the experimenter. Before the experiment begins, all subjects are assigned producer's numbers 1 to 20 by a lottery. Once assigned, these producer's numbers will not change throughout the session.

The experiment consists of 16 periods. At the beginning of each period, 20 producers are assigned into five groups with four subjects each. You join the experiment as a member of a group. The combination of subjects in each period is predetermined randomly by the computer.

The outline of each period is as follows. First, each producer is assigned some money. Then, producers submit to the experimenter a production cost as how much they would like to pay to produce a good and a selling price as the price at which they want to sell the good. If the producer sells the good to the experimenter, he or she produces the good. The producer uses the selling price of the good and his or her money as the production cost. After that, the experimenter investigates the quality of the good. If the experimenter finds that the quality of the good does not satisfy the value described later in Section 6, the producer must make a payment to the experimenter.

3. Money assigned to producers

First, we will explain the money assigned to each producer. A detailed explanation of the role of money is provided later in Section 7. Money is assigned to each producer at the beginning of each period. You can use the money assigned in each period in only that period. You cannot carry over money to use them in the next session. In addition,

the money used in this experiment is measured using the virtual unit of “points” (pts).

The money assigned to each producer is private information that only the producer him or herself knows. However, two or more producers in each group will be assigned 0 pts in money. That is, in each group there are two or more producers assigned no money. Note that you cannot know who in your group has been given 0 pts in money.

4. The production cost of goods

Here, we explain how to determine the production cost of goods. Each producer decides how much costs they will spend to produce the good they sell to the experimenter. At the beginning of each period, each producer is assigned a maximum value of the production cost. The production cost you decide on must be a whole number at least 0 pts and less than or equal to the maximum value of your production cost. The maximum value of the production cost assigned to each producer is private information, so that nobody but the producer him or herself knows it. Note that you must decide the production cost.

Following the rules described in Section 5 below, each producer who has sold a good to the experimenter produces the good at his determined production cost. Note that production of goods is done by the computer automatically.

5. Selling and producing goods

Now we will explain the rules on how the experimenter buys goods. The experimenter buys only one unit of goods from one producer in each group consisting of four people each, following the rules described below.

Through the computer screen, the experimenter asks all producers in each group to submit the selling prices of the goods. The experimenter will only buy goods whose selling prices are less than or equal to 58 pts. You can submit to the experimenter selling prices in whole numbers from 0 pts to 58 pts.

All producers produce the goods at their determined production cost, using the selling price of the goods and their assigned money. Therefore, the selling price you submit to the experimenter and your production cost need to satisfy the following constraint.

$$\text{Production cost} \leq \text{selling price} + \text{money}$$

Each producer can submit a selling price and a production cost satisfying this constraint. In the experiment, you need to decide the selling price and production cost at the same time.

When all of you have submitted selling prices and production costs, the experimenter chooses the one producer whose bid is the lowest in each group. Then, he or she buys the good from that producer at that producer's selling price. If multiple producers have the same selling prices, the experimenter chooses one producer randomly and buys the good from that producer.

The producer who sells the good receives payment of sale proceeds and uses this and his or her money to produce the good at his or her predetermined production cost. Therefore, that producer's cash balance after producing the good is as follows:

$$\text{Producer's cash balance} = \text{money} + \text{selling price} - \text{production cost}$$

Note that producers who do not sell the good to the experimenter do not produce the good. Since these producers do not spend their production costs, their cash balance is only their assigned money.

6. The experimenter's investigation of the quality of goods

The producer who sells the good to the experimenter spends the predetermined production cost and produces the good. The producer decides quality of the good. The quality of the good is calculated as shown below.

$$\text{Quality of good} = \text{production cost}/\text{maximum value of the production cost}$$

This equation show that the quality of the good decreases as the production cost the producer spends decreases. You cannot choose a production cost exceeding the maximum value of the production cost assigned to each producer, so that the quality of the good can be 1 at the maximum. Product quality is rounded of to the second decimal point.

After accepting the produced good, the experimenter examines it to determine whether it has quality of 1. The probability that the experimenter would detect product quality of less than 1 is determined by the production costs spent by the producer. Specifically, it is decided as shown below.

Probability of detection by the experimenter (%)

$$= (1 - \text{the quality of the good}) \times 100$$

$$= (1 - \text{production cost of the good}/\text{maximum value of the production cost of the good}) \times 100$$

Hence, the lower the quality of the good is, higher the probability that the experimenter detects that the quality is less than 1. Note that investigation of the quality of the good is done by the computer automatically, based on the above calculation of the probability.

7. The producer's payments and the role of the money

If the experimenter detects that the quality of the good produced by the producer is less than 1, the producer pays money following the rules below. The producer pays amounts of money, as the payment to the experimenter, equal to twice the difference between the maximum value of the production costs needed to produce a good whose quality is 1 and the actual production cost he or she spent. That is,

Payments to the experimenter

$$= (\text{maximum value of the production cost} - \text{production cost}) \times 2$$

From these payments, the producer's cash balance is as follows.

Cash balance held by the producer

$$= (\text{money} + \text{selling price} - \text{production cost}) - \text{payments to the experimenter}$$

$$= (\text{money} + \text{selling price} - \text{production cost}) - (\text{maximum value of production cost} - \text{production cost}) \times 2$$

This equation shows that if $(\text{money} + \text{selling price} - \text{production cost}) \geq \text{payments to the experimenter}$ the producer can pay the entire amount of the payments to the experimenter. But if $(\text{money} + \text{selling price} - \text{production cost}) < \text{payments to the experimenter}$, the producer cannot pay the entire amount of the payments to the experimenter. In this case, the producer pays the entire amount of $(\text{money} + \text{selling price} - \text{production cost})$ as the upper limit he or she can pay. Therefore, the producer's cash balance holding is as follows.

$$\text{Cash balance held by the producer} = 0$$

That is, since he or she has paid the upper limit of the money that he or she can pay, his or her cash balance holding is 0.

The above explain covers the case in which the experimenter detects that the quality of the produced good is less than 1. If the experimenter does not detect that the quality of producing good is less than 1, the producer does not need to incur any payments to the

experimenter. The probability that the experimenter does not detect that the quality of the producing good is less than 1 is as follows.

$$\begin{aligned} & \text{Probability of no detection by the experimenter (\%)} \\ & = 100\% - \text{probability of detection by the experimenter} \end{aligned}$$

In a case in which the experimenter does not detect that the quality of the produced good is less than 1, the producer does not spend any money but his determined production cost. Therefore, the producer's cash balance holding is money + selling price – production cost.

To summarize the above explanations, after the experimenter's investigation of the quality, the producer's cash balance holding will be one of the following.

- When the experimenter has detected that the quality of the good is less than 1:

If (money + selling price – production cost) \geq payments to the experimenter,

The producer's cash balance holding

= (money + selling price – production cost) – payments to the experimenter

If (money + selling price – production cost) $<$ payments to the experimenter,

The producer's cash balance holding = 0

- When the experimenter has not detected that the quality of the good is less than 1:

The producer's cash balance holding = (money + selling price – production cost)

8. Profits of producers and calculation of rewards

In each period, after the above procedures are complete the experimenter will tell you alone whether or not the experimenter will buy the good from you and your profit. Profits are calculated as the difference resulting from subtracting the cash balance at the beginning of each period from the cash balance held at the end of each period. This means,

$$\text{Profit} = \text{cash balance holding at the end of each period} - \text{money}$$

Since, as described in Section 7 above, the cash balance holding at the end of each period is the cash balance held by the producer after the experimenter investigates the quality of the good, profit is calculated in one of the following three ways.

- When the experimenter has detected that the quality of the good is less than 1:

If $(\text{money} + \text{selling price} - \text{production cost}) \geq \text{payments to the experimenter}$,
Profit = $\{ (\text{money} + \text{selling price} - \text{production cost}) - \text{payments to the experimenter} \} - \text{money}$
= $\text{selling price} - \text{production cost} - \text{payments to the experimenter}$
If $(\text{money} + \text{selling price} - \text{production cost}) < \text{payments to the experimenter}$,
Profit = $0 - \text{money} = - \text{money}$

- When the experimenter has not detected that the quality of the good is less than 1:

Profit = $(\text{money} + \text{selling price} - \text{production cost}) - \text{money}$
= $\text{selling price} - \text{production cost}$

After the experimenter investigates the quality of the good, the producer's cash balance holding is 0 at the minimum. This is the minimum cash balance held at the end of each period. Since profits are then subtracted from the money, the minimum profit is the negative value of the amount of money. Notice that you cannot carry over money to use them in the next session.

Let's review the explanations above using illustrations. Please follow along on the separate outline of the experiment while listening. First, we will explain the profits the producer earns if the experimenter has detected that the quality of the good is less than 1. See Figure 1. Here, we explain the case in which $(\text{money} + \text{selling price} - \text{production cost}) \geq \text{payments to the experimenter}$ and profits are positive. The vertical axis represents amounts of money. First, we suppose that the producer's cash balance holding after he or she sells and produces the good is as shown in the figure. Next, we suppose that his or her cash balance holding immediately after production is more than the payments to the experimenter. At this time, the producer has enough cash balance to pay the experimenter, so that, as shown in the figure, his or her cash balance holding after examination of the good is positive. If the producer's cash balance holding after the experimenter's investigation is, as in the figure, larger than the amount of the money assigned at the beginning of the experiment, this producer's profits (= his or her cash balance after the investigation - money) have a positive value.

Next, see Figure 2. Here, we explain the case in which $(\text{money} + \text{selling price} - \text{production cost}) < \text{payments to the experimenter}$ and profits are negative. First, we suppose that the producer's cash balance holding is as shown in the figure after he or she sells and produces the good. Then, we suppose that his or her cash balance holding immediately after production is more than the payments to the experimenter. At this time, the producer has enough cash balance to pay the experimenter, so that, as in the

figure, his or her cash balance has a positive value. However, if the producer's cash balance holding after the experimenter's investigation is, as in the figure, smaller than the amount of the money assigned at the beginning of the experiment, this producer's profits (= his or her cash balance after the investigation – money) become negative in value. In the figure, negative profits are shown by the downward bar graph.

Next, see Figure 3. Here, we explain the case in which (money + selling price – production cost) < payments to the experimenter. First, we suppose that the producer's cash balance holding is as shown in the figure after he or she sells and produces the good. Then, we suppose that his or her cash balance holding immediately after production is less than the payments to the experimenter. At this time, the producer pays all the money that he or she can pay, so that his or her cash balance becomes 0. Therefore, subtracting the money assigned at the beginning of the experiment from the profits results in a value equal to the negative of the amount of the money.

As shown above, the minimum value of the cash balance held by the producer following completion of the investigation by the experimenter is 0. This is the minimum cash holding of the producer at the end of each period. Since profits are in the amount of money derived by subtracting the amount of money from that figure, the minimum amount of profit is a value equal to the negative of the amount of the money.

Next, we will explain the profits the producer earns if the experimenter has not detected that the quality of the good is less than 1. See Figure 4. Here, since the experimenter has not detected that the quality of the good is less than 1, no payment to the experimenter is incurred. For this reason, the cash balance held after the investigation by the experimenter is equal to the cash balance held following production. If, as in the figure, this cash balance held following production is greater than the amount of money, the producer has earned a positive profit. Next, take a look at Figure 5. In this case too, since the experimenter has not detected that the quality of the good is less than 1, no payment to the experimenter is incurred. However, since the cash balance held following production is less than the amount of money, the producer has a negative profit.

Above we explained how to calculate profits if you sell a good to the experimenter. However, a producer who does not sell the good to the experimenter does not produce any goods and is not investigated by the experimenter. For this reason, such a producer's profits always will be 0.

Additionally, in the experiment you will receive tables showing all profits with respect to selling prices and production costs. You can make your decisions by referring to that table. We will explain how to see that table following these instructions.

The rewards each subject receives after the experiment is complete are proportional to the total profits of the producer role each subject plays in the 16 periods of the experiment and determined as follows:

$$\text{Rewards} = (\text{total profits of the producer role you played} + 40 \text{ pts} \times 16 \text{ periods}) \times 7 \text{ yen}$$

After each period is complete, apart from the profits you earn, a show-up fee of 40 pts will be added automatically. This money is not actually handed to you. Instead, the experimenter holds on to it. Therefore, you cannot use this money for production costs or payments for the experimenter in the next period. If the total profits you earn are positive, that amount is added to the total show-up fees for the 16 periods. But if your total profits are negative, that amount is subtracted from the total show-up fees for the 16 periods. The experimenter will not disclose to other subjects the identities of subjects assigned to each producer number either during or after the experiment. The experimenter also will not announce which subjects have earned profits. During the experiment, follow the directions of the experimenter and do not talk with others.

This concludes the explanation of the experiment. In this experiment, you cannot ask any questions of the experimenter. This is because we will test you on your understanding of the experiment. If you feel ill, your computer has any problems, or you have any urgent needs, please raise your hand quietly. Next, we will explain how to read the payoff tables with respect to the selling price and production cost and how to operate the computer you will use in the experiment.

Outline of the Experiment

Fig. 1: When the experimenter has detected that the quality is less than 1, $(\text{money} + \text{selling price} - \text{production cost}) \geq \text{payment to experimenter}$, and profit is

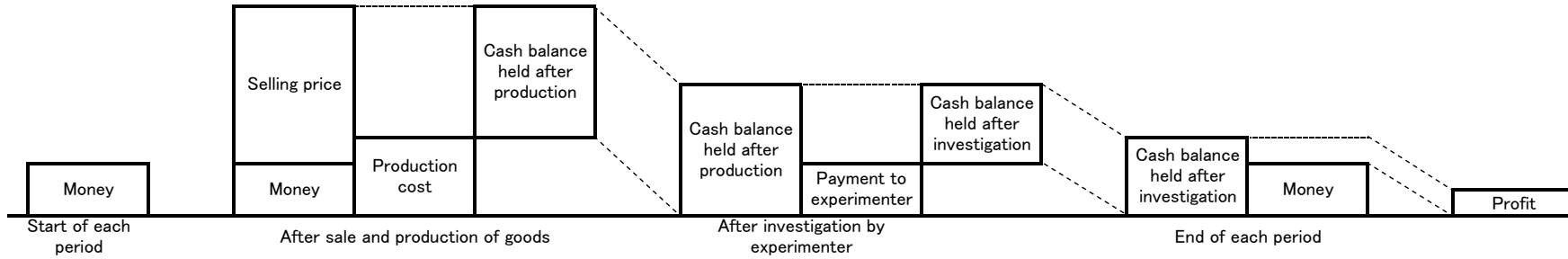


Fig. 2: When the experimenter has detected that the quality is less than 1, $(\text{money} + \text{selling price} - \text{production cost}) \geq \text{payment to experimenter}$, and profit is

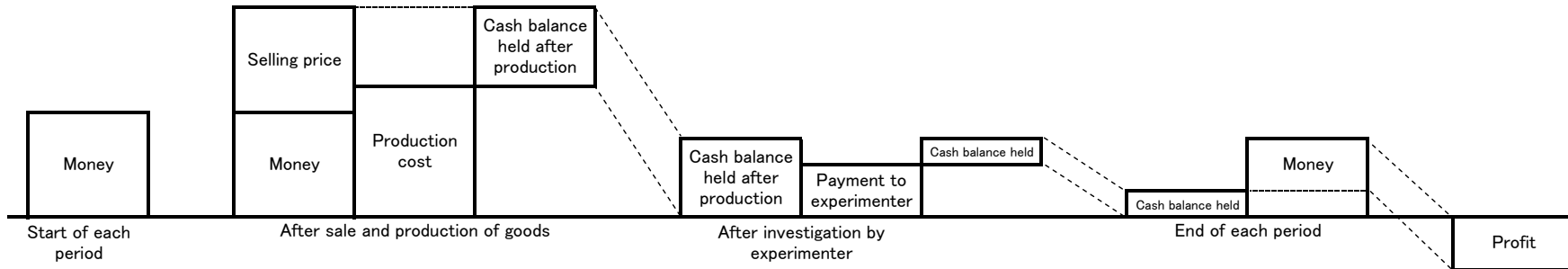


Fig. 3: Profit when the experimenter has detected that the quality is less than 1, and $(\text{money} + \text{selling price} - \text{production cost}) < \text{payment to experimenter}$

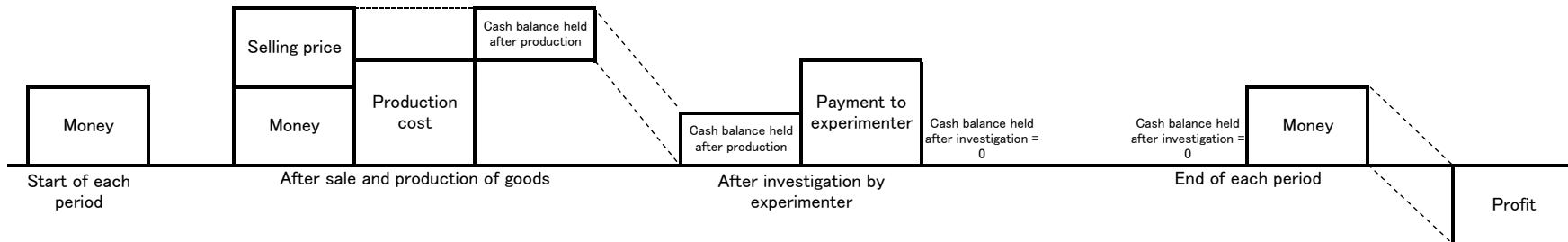


Fig. 4: When the experimenter has not detected that the quality is less than 1, and profit is positive

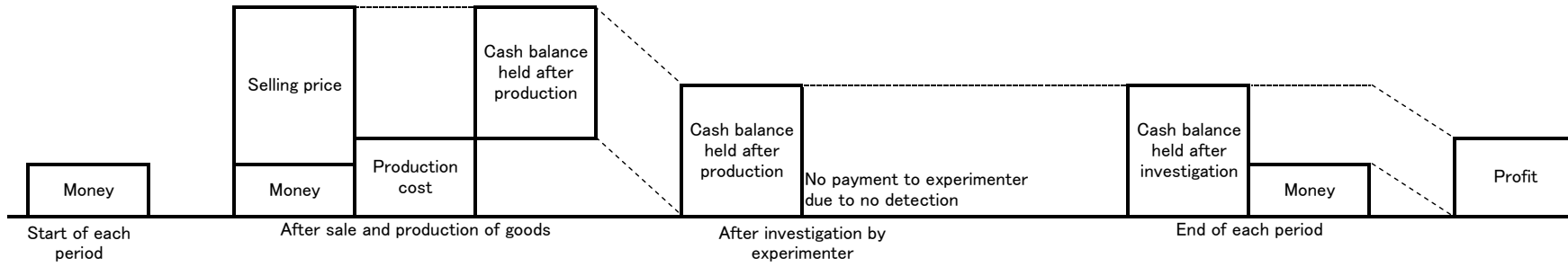
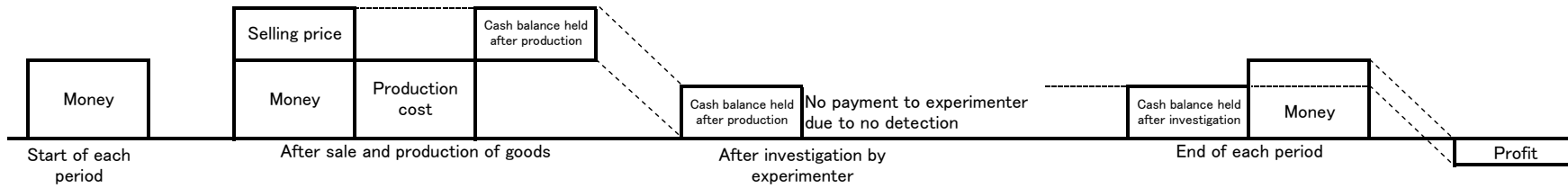


Fig. 5: When the experimenter has not detected that the quality is less than 1, and profit is negative



2. PC operation manuals and the record sheet

How to read the payoff tables and how to operate the computer

Now we will explain how to read the payoff tables used in the experiment as well as the software screens and how to operate the computer you will use. At the start of each session, the experimenter will hand each producer a payoff table showing his or her money and the maximum value of production costs.

The payoff tables you already have been given are practice payoff tables for use in this explanation and in later practice operating the computers. Please look at your practice payoff table. The figures written on these are unrelated to the values used in the actual experiment. The amount of money and the maximum value of production costs are written in the upper left of the payoff table. The practice values are 150 for money and 200 for maximum production costs. In the experiment, please copy the amount of money and the maximum value of production costs to your record sheet as soon as you are given your payoff table.

First, we will explain how to read the payoff table. Selling prices are written on the far left and the far right of the table. For practice, the maximum selling price is 300 pts. At the very top of the payoff table, production costs are written in the first line. The maximum value of production costs for practice is 200 pts. In the second line from the top, the quality of a good with the production costs shown in the first row is shown. In the third line, the probability that the experimenter would detect that the quality of the good in line 2 is less than 1 is written in green, and the probability that the experimenter would not detect this is written in blue. Each of these probabilities is written as a percentage. These values also are written at the very bottom of the payoff table.

You can find your profit by looking at the fields where selling price and production cost intersect. In each field, the value shown in green is the profit if the experimenter detects that the quality of the good is less than 1, while the value shown in blue is the profit if the experimenter does not detect this. These fields on the payoff table show not just numbers but also dashes (-). These are written in the fields where selling prices and production costs intersect so that the constraint $\text{production cost} \leq \text{selling price} + \text{money}$ is not satisfied. They indicate that such selling prices and production costs may not be submitted to the experimenter. You can see some dashes (-) on the right-hand side of page 2 of the practice payoff table. Also, on the practice payoff table both selling prices and production costs are shown in 5-pt intervals. However, in the actual experiment the payoff tables will show these figures in 1-pt intervals. In addition, the practice payoff

table has bold horizontal lines spaced at 50-pt selling-price intervals, while in the actual payoff table these lines are spaced at 10-pt intervals.

After the payoff tables are distributed, a screen like that shown under Screen 1 will appear on the computers in front of you. Take a look at Screen 1 on the attached document. On the left side of the screen, "Your producer no.," "Your money," and "Your maximum production cost" are displayed, in that order. As an example, in this illustration the producer number 1 is shown under "Your producer no." In addition, as shown on the practice payoff table the values of 150 for money and 200 for maximum production cost are displayed as well.

Beneath these, notes are shown concerning entry of production costs of good and selling prices. For practice, all subjects can enter only selling prices that are whole numbers in the range from 0 through 200. Also, they can enter only production costs that are whole numbers in the range from 0 through 300. Furthermore, these values must satisfy the constraint $\text{production cost} \leq \text{money} + \text{selling price}$.

Beneath these notes are spaces for entering "Your submitted production cost" and "Your submitted selling price." By entering your selling price and production cost and then clicking on the "Calculate" button, you can calculate the probability of detection by the experimenter and the profit in that case as well as the probability of no detection by the experimenter and the resulting profit, as many times as you like. These values are displayed on the right-hand side of the screen when you press the "Calculate" button.

Now we will explain how to use the "Calculate" button. As examples, production cost of 100 and a selling price of 100 have been entered on Screen 1. From the payoff table, you can see that in this case quality is 0.50, the probability of detection is 50%, the probability of no detection is 50%, the profit if detected is -150, and the profit if not detected is 0. Screen 2 shows the results of pressing the "Calculate" button. Take a look at Screen 2. On the right-hand side of the screen, "Your submitted production cost," "Your good's quality," "Your submitted selling price," "Probability of detection of a good with quality of less than 1," "Profit if detected," "Probability of no detection of a good with quality of less than 1," and "Profit if not detected" are displayed, in that order. As you can see, these values are the same as those on the payoff table.

Now, let's repeat this process. To change the selling price and production cost and calculate the new profit, enter new values in the fields next to "Your submitted good production cost" and "Your submitted good selling price" on the bottom left of Screen 2 and click on the "Calculate" button. Now look at Screen 3. As an example, Screen 3 shows the screen that would result after entering a production cost of 190 and a selling price of 300 and then clicking on the "Calculate" button. As you can see on the

right-hand side of the screen, this time the quality is 0.95, the probability of detection is 5%, the profit if detected is 95, the probability of no detection is 95%, and the profit if not detected is 105.

Since no matter how many times you press it the "Calculate" button will not send any data to the experimenter, you can make as many trial calculations as you wish. In cases such as when making calculations, you can refer to the payoff tables distributed to you.

If you are finished with your calculations and you have decided on a selling price and production costs, enter the selling price and the production cost in the fields for them on the record sheet. After you finish inputting these, click on the "OK" button at the bottom right of the screen. Be careful, because you cannot cancel or revise the values you entered once you have clicked on the "OK" button.

At the upper left of the screen, under "period," you can see how many times the experiment has been conducted through the current period. In this example, "Practice 1/2" is shown, indicating that this is the first practice session. Also, under "Time remaining (seconds)" in the upper right of the screen you can see how much time you have left until you need to submit your production cost and selling price to the experimenter. All subjects are asked to enter their production costs and selling prices and click the "OK" button within six minutes (360 seconds). If you have time remaining after clicking the "OK" button, please fill out the "Reasons for deciding on the selling price and production cost" on the record sheet. Brief answers are perfectly acceptable. Once all subjects have clicked the "OK" button, the experimenter will choose a producer from whom to purchase good, even if the six minutes have not yet expired.

Now we will explain the results screen. Let's assume you have clicked on the "OK" button as shown on Screen 3. If you were able to sell your good to the experimenter, who then detected that the good quality was less than 1, a screen like that shown in Screen 4 will appear. Take a look at Screen 4, which contains the following output: "The experimenter purchases your good," "The experimenter has detected that the quality of your good is less than 1," and "Your profit: 90 pts."

If you were able to sell your good to the experimenter, who then did not detect that the good quality was less than 1, a screen like that shown in Screen 5 will appear. Take a look at Screen 5, which contains the following output: "The experimenter purchases your good," "The experimenter has not detected that the quality of your good is less than 1," and "Your profit: 110 pts."

If you were unable to sell your good to the experimenter, a screen like that shown in Screen 6 will appear. Take a look at Screen 6, which contains the following output: "The experimenter does not purchase your good" and "Your profit: 0 pts."

In the actual experiment, in the record sheet, in the space under "Quality of less than 1 detected?" please enter "Y" if quality of less than 1 was detected and "N" if not. Under "Your profit," copy the amount of profit. After copying the profit, click on the "OK" button at the bottom right of the screen. Be careful, because the screen will switch automatically after 20 seconds. Once the first session is complete, new payoff tables will be distributed. Follow the same steps to start session 2. Use the same operation methods in session 2 and later sessions. The experiment will conclude at the end of session 16.

For the next six minutes, each of you can practice making calculations using the practice payoff tables. In operation practice, you can enter selling prices and production costs only in 5-pt intervals. Also, you cannot click the "OK" button in this practice. This is intended as practice for using the calculation function only.

画面1 Screen 1

あなたの生産者番号 1 Your producer no.: 1
 あなたの資金 150 Your money: 150
 あなたの生産費用の最大値 200 Your maximum production cost: 200

商品の生産費用は 0pt 以上 200 pt 以下で、
 商品の売値は 0pt 以上 300pt 以下で、
 生産費用 ≤ 資金 + 売値
 を満たすように入力してください。

Enter values satisfying the following conditions:
 Production cost of goods in the range 0–200 pts,
 Selling price of good in the range 0–300 pts,
 Production cost ≤ money + selling price.

あなたの提示した商品の生産費用
 あなたの商品の質
 あなたの提示した商品の売値

Your submitted production cost
 of good:
 0.00 Your good's quality:
 0 Your submitted selling price of
 good:

質が1未満であることが発見される確率 0%
 発見されたときの利益
 質が1未満であることが発見されない確率 0%
 発見されなかったときの利益

0 Probability of detection of a
 good with quality of less than 1:
 0 Profit if detected:
 0 Probability of no detection of a
 good with quality of less than 1:
 0 Profit if not detected:

あなたの提示する商品の生産費用
 あなたの提示する商品の売値

Your submitted production cost of good:
 Your submitted selling price of good:

計算ボタンを押しても実験者にデータは送信されません

No data will be sent to the experimenter when you press the "Calculate" button.

計算

Calculate

OKボタンを押すと実験者にデータが送信されます

Data will be sent to the experimenter when you press the "OK" button.

OK

画面2 Screen 2

あなたの生産者番号 1 Your producer no.: 1
 あなたの資金 150 Your money: 150
 あなたの生産費用の最大値 200 Your money: 150

商品の生産費用は 0pt 以上 200 pt 以下で、
 商品の売値は 0pt 以上 300pt 以下で、
 生産費用 ≤ 資金 + 売値
 を満たすように入力してください。

Enter values satisfying the following conditions:
 Production cost of goods in the range 0–200 pts,
 Selling price of good in the range 0–300 pts,
 Production cost ≤ money + selling price.

あなたの提示する商品の生産費用 Your submitted production cost of good:
 あなたの提示する商品の売値 Your submitted selling price of good:

あなたの提示した商品の生産費用 100
 あなたの商品の質 0.50
 あなたの提示した商品の売値 100

質が1未満であることが発見される確率 0%
 発見されたときの利益 -150
 質が1未満であることが発見されない確率 0%
 発見されなかったときの利益 0

Your submitted production cost of good:
 Your good's quality:
 Your submitted selling price of good:
 Probability of detection of a good with quality of less than 1:
 Profit if detected:
 Probability of no detection of a good with quality of less than 1:
 Profit if not detected:

計算ボタンを押しても実験者にデータは送信されません
 No data will be sent to the experimenter when you press the "Calculate" button.

計算

Calculate

OKボタンを押すと実験者にデータが送信されます
 Data will be sent to the experimenter when you press the "OK" button.

OK

画面3 Screen 3

あなたの生産者番号 1 Your producer no.: 1
 あなたの資金 150 Your money: 150
 あなたの生産費用の最大値 200 Your money: 150

商品の生産費用は 0pt 以上 200 pt 以下で、
 商品の売値は 0pt 以上 300pt 以下で、
 生産費用 ≤ 資金 + 売値
 を満たすように入力してください。

Enter values satisfying the following conditions:
 production cost of goods in the range 0–200 pts,
 selling price of good in the range 0–300 pts,
 Production cost ≤ money + selling price.

あなたの提示する商品の生産費用 Your submitted production cost of good:
 あなたの提示する商品の売値 Your submitted selling price of good:

あなたの提示した商品の生産費用
 あなたの商品の質
 あなたの提示した商品の売値

Your submitted production cost
 of good:
 Your good's quality:
 Your submitted selling price of
 good:

質が1未満であることが発見される確率 00
 発見されたときの利益
 質が1未満であることが発見されない確率 00
 発見されなかったときの利益

5 Probability of detection of a
 good with quality of less than 1:
 90 Profit if detected:
 95 Probability of no detection of a
 good with quality of less than 1:
 110 Profit if not detected:

計算ボタンを押しても実験者にデータは送信されません

No data will be sent to the experimenter when you press the "Calculate" button.

計算

Calculate

OKボタンを押すと実験者にデータが送信されます

Data will be sent to the experimenter when you
press the "OK" button.

OK

画面4 Screen 4

実験者はあなたから商品を購入します

The experimenter purchases your good.

実験者は商品の質が1未満であることを発見しました

The experimenter has detected that the quality of your good is less than 1.

あなたの利益 : 90 pt

Your profit: 90 pts

OK

画面5 Screen 5

実験者はあなたから商品を購入します

The experimenter purchases your good.

実験者は商品の質が1未満であることを発見しませんでした

The experimenter has detected that the quality of your good is less than 1.

あなたの利益 : 110 pt

Your profit: 90 pts

OK

画面6 Screen 6

実験者はあなたから商品を購入しません。

The experimenter does not purchase your good.

あなたの利益 : 0 pt

Your profit: 0 pts

OK

Record Sheet

Date(Y/M/D) / /

Producer's ID

Period	Funds	Max. value of cost	Selling price	Production cost	Quality	The reason why you decide these selling price and production cost	Quality of less than 1 detected?	Profits
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Total profits

--

3. The examination and it's answer

Test

Date (Y/M/D): ____ / ____ / ____; seating no.: _____

I. Answer questions 1-5 below using numerical values. Enter your answers in the blanks beneath each question. The sample values for each question are unrelated to the values in the actual experiment. In the experiment, producers could choose selling prices from the range of whole numbers from 0 pts to 58 pts. For convenience, this restriction of values to the range from 0 pts to 58 pts has been ignored in the sample values for questions below.

Question 1: When assigned a maximum value of 500 pts for production costs, if paying production costs of 400 pts what would be the quality score, and if the experimenter purchased the good what would be the probability that it would be detected that quality was less than 1?

Quality: 0.8 Probability of detection: 20%

Question 2: Assume production costs of 600 pts and a selling price of 700 pts in a time in which money of 600 pts and a maximum value of 800 pts for production costs have been assigned. Under these conditions, what would profit be in each of the following cases:

- (1) When the experimenter has not purchased the good,
- (2) When the experimenter has purchased the good and quality has not been detected to be less than 1
- (3) When the experimenter has purchased the good and quality has been detected to be less than 1

Profit in case (1): 0 Profit in case (2): 100 Profit in case (3): -300

Question 3: Assume production costs of 600 pts and a selling price of 500 pts in a time in which money of 600 pts and a maximum value of 800 pts for production costs have been assigned. Under these conditions, what would profit be in each of the following cases:

- (1) When the experimenter has not purchased the good,
- (2) When the experimenter has purchased the good and quality has not been detected to be less than 1
- (3) When the experimenter has purchased the good and quality has been detected to be less than 1

Profit in case (1): 0 Profit in case (2): -100 Profit in case (3): -500

Question 4: Assume production costs of 600 pts and a selling price of 700 pts in a time in which money of 150 pts and a maximum value of 800 pts for production costs have been assigned. Under these conditions, what would profit be in each of the following cases:

- (1) When the experimenter has not purchased the good,

- (2) When the experimenter has purchased the good and quality has not been detected to be less than 1
 (3) When the experimenter has purchased the good and quality has been detected to be less than 1

Profit in case (1): 0 Profit in case (2): 100 Profit in case (3): -500

Question 5: Assume production costs of 600 pts and a selling price of 700 pts in a time in which money of 0 pts and a maximum value of 800 pts for production costs have been assigned. Under these conditions, what would profit be in each of the following cases:

- (1) When the experimenter has not purchased the good,
 (2) When the experimenter has purchased the good and quality has not been detected to be less than 1
 (3) When the experimenter has purchased the good and quality has been detected to be less than 1

Profit in case (1): 0 Profit in case (2): 100 Profit in case (3): 0

Question 6: Assume that at one time producers nos. 2, 7, 13, and 16 make up Group A and producers nos. 3, 5, 15, and 19 make up Group B, with each producer having chosen the selling prices in the tables below.

Selling prices of producers in Group A:

Producer no.	2	7	13	16
Selling price (pts)	322	216	550	841

Selling prices of producers in Group B:

Producer no.	3	5	15	19
Selling price (pts)	151	350	130	231

In this case, from which producer (no.) in each group would the experimenter purchase products?

Group A: 7

Group B: 15

II. Answer "T" for "true" or "F" for "false" for each of the following questions 7 - 13. Enter your answer in the blank next to each question.

Question 7: Each time, there were two or more producers in each group with money of 0 pts. T

Question 8: Amounts of money can be carried over to use the next time. F

Question 9: Production costs and selling prices need to be decided on so that production costs \leq fund + selling price. T

Question 10: Production costs can be changed after selling goods to the experimenter. F

Question 11: The production costs entered prior to submitting a selling price apply even when unable to sell a good to the experimenter. _____ F _____

Question 12: The amount of profit is added to money the next time. _____ F _____

Question 13: Among subjects with identical total amounts of profit upon completion of the experiment, the subject who sold goods to the experimenter more times is deemed to have higher profit relative to the other subject. _____ F _____

4. Payoff tables for the practice and actual experiment

First payoff tables were used in the practice and remaining tables were in the actual experiment. Although, here, we provide all tables in A4 size, all of them were printed in A3 size for subject to see easily in the experiment.

Practice payoff table Money 150 Max. value of the production cost: 200

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

		105		110		115		120		125		130		135		140		145		150		155		160		165		170		175		180		185		190		195		200					
		0.53		0.55		0.58		0.60		0.63		0.65		0.68		0.70		0.73		0.75		0.78		0.80		0.83		0.85		0.88		0.90		0.93		0.95		0.98		1.00					
		47%	53%	45%	55%	42%	58%	40%	60%	37%	63%	35%	65%	32%	68%	30%	70%	27%	73%	25%	75%	22%	78%	20%	80%	17%	83%	15%	85%	12%	88%	10%	90%	7%	93%	5%	95%	2%	98%	0%	100%				
0		-150	-105	-150	-110	-150	-115	-150	-120	-150	-125	-150	-130	-150	-135	-150	-140	-150	-145	-150	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
5		-150	-100	-150	-105	-150	-110	-150	-115	-150	-120	-150	-125	-150	-130	-150	-135	-150	-140	-150	-145	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	
10		-150	-95	-150	-100	-150	-105	-150	-110	-150	-115	-150	-120	-150	-125	-150	-130	-150	-135	-150	-140	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	
15		-150	-90	-150	-95	-150	-100	-150	-105	-150	-110	-150	-115	-150	-120	-150	-125	-150	-130	-150	-135	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	
20		-150	-85	-150	-90	-150	-95	-150	-100	-150	-105	-150	-110	-150	-115	-150	-120	-150	-125	-150	-130	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	
25		-150	-80	-150	-85	-150	-90	-150	-95	-150	-100	-150	-105	-150	-110	-150	-115	-150	-120	-150	-125	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	
30		-150	-75	-150	-80	-150	-85	-150	-90	-150	-95	-150	-100	-150	-105	-150	-110	-150	-115	-150	-120	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	
35		-150	-70	-150	-75	-150	-80	-150	-85	-150	-90	-150	-95	-150	-100	-150	-105	-150	-110	-150	-115	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	
40		-150	-65	-150	-70	-150	-75	-150	-80	-150	-85	-150	-90	-150	-95	-150	-100	-150	-105	-150	-110	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	
45		-150	-60	-150	-65	-150	-70	-150	-75	-150	-80	-150	-85	-150	-90	-150	-95	-150	-100	-150	-105	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	
50		-150	-55	-150	-60	-150	-65	-150	-70	-150	-75	-150	-80	-150	-85	-150	-90	-150	-95	-150	-100	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	
55		-150	-50	-150	-55	-150	-60	-150	-65	-150	-70	-150	-75	-150	-80	-150	-85	-150	-90	-150	-95	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	
60		-150	-45	-150	-50	-150	-55	-150	-60	-150	-65	-150	-70	-150	-75	-150	-80	-150	-85	-150	-90	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	
65		-150	-40	-150	-45	-150	-50	-150	-55	-150	-60	-150	-65	-150	-70	-150	-75	-150	-80	-150	-85	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65	
70		-150	-35	-150	-40	-150	-45	-150	-50	-150	-55	-150	-60	-150	-65	-150	-70	-150	-75	-150	-80	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	
75		-150	-30	-150	-35	-150	-40	-150	-45	-150	-50	-150	-55	-150	-60	-150	-65	-150	-70	-150	-75	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	
80		-150	-25	-150	-30	-150	-35	-150	-40	-150	-45	-150	-50	-150	-55	-150	-60	-150	-65	-150	-70	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	
85		-150	-20	-150	-25	-150	-30	-150	-35	-150	-40	-150	-45	-150	-50	-150	-55	-150	-60	-150	-65	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85
90		-150	-15	-150	-20	-150	-25	-150	-30	-150	-35	-150	-40	-150	-45	-150	-50	-150	-55	-150	-60	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90	
95		-150	-10	-150	-15	-150	-20	-150	-25	-150	-30	-150	-35	-150	-40	-150	-45	-150	-50	-150	-55	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95	
100		-150	-5	-150	-10	-150	-15	-150	-20	-150	-25	-150	-30	-150	-35	-150	-40	-150	-45	-150	-50	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	
105		-150	0	-150	-5	-150	-10	-150	-15	-150	-20	-150	-25	-150	-30	-150	-35	-150	-40	-150	-45	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105	
110		-150	5	-150	0	-150	-5	-150	-10	-150	-15	-150	-20	-150	-25	-150	-30	-150	-35	-150	-40	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	
115		-150	10	-150	5	-150	0	-150	-5	-150	-10	-150	-15	-150	-20	-150	-25	-150	-30	-150	-35	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115	
120		-150	15	-150	10	-150	5	-150	0	-150	-5	-150	-10	-150	-15	-150	-20	-150	-25	-150	-30	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	
125		-150	20	-150	15	-150	10	-150	5	-150	0	-150	-5	-150	-10	-150	-15	-150	-20	-150	-25	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125	
130		-150	25	-150	20	-150	15	-150	10	-150	5	-150	0	-150	-5	-150	-10	-150	-15	-150	-20	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	
135		-150	30	-150	25	-150	20	-150	15	-150	10	-150	5	-150	0	-150	-5	-150	-10	-150	-15	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	135	
140		-150	35	-150	30	-150	25	-150	20	-150	15	-150	10	-150	5	-150	0	-150	-5	-150	-10	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	
145		-150	40	-150	35	-150	30	-150	25	-150	20	-150	15	-150	10	-150	5	-150	0	-150	-5	-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	145	
150		-145	45	-140	40	-135	35	-130	30	-125	25	-120	20	-115	15	-110	10	-105	5	-100	0	-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	
155		-140	50	-135	45	-130	40	-125	35	-120	30	-115	25	-110	20	-105	15	-100	10	-95	5	-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	
160		-135	55	-130	50	-125	45	-120	40	-115	35	-110	30	-105	25	-100	20	-95	15	-90	10	-85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160	
165		-130	60	-125	55	-120	50	-115	45	-110	40	-105	35	-100	30	-95	25	-90	20	-85	15	-80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	165	
170		-125	65	-120	60	-115	55	-110	50	-105	45	-100	40	-95	35	-90	30	-85	25	-80	20	-75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170	
175		-120	70	-115	65	-110	60	-105	55	-100	50	-95	45	-90	40	-85	35	-80	30	-75	25	-70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	175	
180		-115	75	-110	70	-105	65	-100	60	-95	55	-90	50	-85	45	-80	40	-75	35	-70	30	-65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180	
185		-110	80	-105	75	-100	70	-95	65	-90	60	-85	55	-80	50	-75	45	-70	40	-65	35	-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	185	
190		-105	85	-100	80	-95	75	-90	70	-85	65	-80	60	-75	55	-70	50	-65	45	-60	40	-55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190	
195		-100	90	-95	85	-90	80	-85	75	-80	70	-75	65	-70	60	-65	55	-60	50	-55	45	-50	-																						

Money 0 Max. value of the production cost: 24

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Selling price	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		Selling price																										
	0.00		0.04		0.08		0.13		0.17		0.21		0.25		0.29		0.33		0.38		0.42		0.46		0.50		0.54		0.58		0.63		0.67		0.71		0.75		0.79		0.83																												
	100%	0%	96%	4%	92%	8%	87%	13%	83%	17%	79%	21%	75%	25%	71%	29%	67%	33%	62%	38%	58%	42%	54%	46%	50%	50%	46%	54%	42%	58%	37%	63%	33%	67%	29%	71%	25%	75%	21%	79%	17%	83%																											
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																											
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																										
1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1																									
2	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2																								
3	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3																							
4	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4																							
5	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5																							
6	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6																							
7	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7																						
8	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8																						
9	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9																					
10	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10																					
11	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11																					
12	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12																				
13	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13																			
14	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14																			
15	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15																			
16	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16																			
17	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17																			
18	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18																			
19	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	19																			
20	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	20																		
21	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	0	1	21																		
22	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	0	2	22																	
23	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	0	3	23																
24	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	0	4	24															
25	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	5	25														
26	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	6	26													
27	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	7	27											
28	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	8	28									
29	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	9	29							
30	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	10	30				
31	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	11	31		
32	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	0	12	32
33	0	33	0	32	0	31	0	30	0	29	0																																																										

Money 0 Max. value of the production cost: 24
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

		21		22		23		24			
		0.88		0.92		0.96		1.00			
		12%	88%	8%	92%	4%	96%	0%	100%		
0		-	-	-	-	-	-	-	-	-	0
1		-	-	-	-	-	-	-	-	-	1
2		-	-	-	-	-	-	-	-	-	2
3		-	-	-	-	-	-	-	-	-	3
4		-	-	-	-	-	-	-	-	-	4
5		-	-	-	-	-	-	-	-	-	5
6		-	-	-	-	-	-	-	-	-	6
7		-	-	-	-	-	-	-	-	-	7
8		-	-	-	-	-	-	-	-	-	8
9		-	-	-	-	-	-	-	-	-	9
10		-	-	-	-	-	-	-	-	-	10
11		-	-	-	-	-	-	-	-	-	11
12		-	-	-	-	-	-	-	-	-	12
13		-	-	-	-	-	-	-	-	-	13
14		-	-	-	-	-	-	-	-	-	14
15		-	-	-	-	-	-	-	-	-	15
16		-	-	-	-	-	-	-	-	-	16
17		-	-	-	-	-	-	-	-	-	17
18		-	-	-	-	-	-	-	-	-	18
19		-	-	-	-	-	-	-	-	-	19
20		-	-	-	-	-	-	-	-	-	20
21		0	0	-	-	-	-	-	-	-	21
22		0	1	0	0	-	-	-	-	-	22
23		0	2	0	1	0	0	-	-	-	23
24		0	3	0	2	0	1	0	0	0	24
25		0	4	0	3	0	2	1	1	1	25
26		0	5	0	4	1	3	2	2	2	26
27		0	6	1	5	2	4	3	3	3	27
28		1	7	2	6	3	5	4	4	4	28
29		2	8	3	7	4	6	5	5	5	29
30		3	9	4	8	5	7	6	6	6	30
31		4	10	5	9	6	8	7	7	7	31
32		5	11	6	10	7	9	8	8	8	32
33		6	12	7	11	8	10	9	9	9	33
34		7	13	8	12	9	11	10	10	10	34
35		8	14	9	13	10	12	11	11	11	35
36		9	15	10	14	11	13	12	12	12	36
37		10	16	11	15	12	14	13	13	13	37
38		11	17	12	16	13	15	14	14	14	38
39		12	18	13	17	14	16	15	15	15	39
40		13	19	14	18	15	17	16	16	16	40
41		14	20	15	19	16	18	17	17	17	41
42		15	21	16	20	17	19	18	18	18	42
43		16	22	17	21	18	20	19	19	19	43
44		17	23	18	22	19	21	20	20	20	44
45		18	24	19	23	20	22	21	21	21	45
46		19	25	20	24	21	23	22	22	22	46
47		20	26	21	25	22	24	23	23	23	47
48		21	27	22	26	23	25	24	24	24	48
49		22	28	23	27	24	26	25	25	25	49
50		23	29	24	28	25	27	26	26	26	50
51		24	30	25	29	26	28	27	27	27	51
52		25	31	26	30	27	29	28	28	28	52
53		26	32	27	31	28	30	29	29	29	53
54		27	33	28	32	29	31	30	30	30	54
55		28	34	29	33	30	32	31	31	31	55
56		29	35	30	34	31	33	32	32	32	56
57		30	36	31	35	32	34	33	33	33	57
58		31	37	32	36	33	35	34	34	34	58
		12%	88%	8%	92%	4%	96%	0%	100%		
		0.88		0.92		0.96		1.00			
		21	22	23	24						

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Money 50

Max. value of the production cost: 24

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20																	
	0.00		0.04		0.08		0.13		0.17		0.21		0.25		0.29		0.33		0.38		0.42		0.46		0.50		0.54		0.58		0.63		0.67		0.71		0.75		0.79		0.83																	
	100%	0%	96%	4%	92%	8%	87%	13%	83%	17%	79%	21%	75%	25%	71%	29%	67%	33%	62%	38%	58%	42%	54%	46%	50%	50%	46%	54%	42%	58%	37%	63%	33%	67%	29%	71%	25%	75%	21%	79%	17%	83%																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
0	-48	0	-47	-1	-46	-2	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	-39	-9	-38	-10	-37	-11	-36	-12	-35	-13	-34	-14	-33	-15	-32	-16	-31	-17	-30	-18	-29	-19	-28	-17	-27	-19	-28	-20	0											
1	-47	1	-46	0	-45	-1	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	-38	-8	-37	-9	-36	-10	-35	-11	-34	-12	-33	-13	-32	-14	-31	-15	-30	-16	-29	-17	-28	-18	-27	-19	-28	-19	-27	-19	1											
2	-46	2	-45	1	-44	0	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	-37	-7	-36	-8	-35	-9	-34	-10	-33	-11	-32	-12	-31	-13	-30	-14	-29	-15	-28	-16	-27	-17	-28	-17	-26	-18	-27	-18	2											
3	-45	3	-44	2	-43	1	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-27	-15	-26	-16	-25	-17	-26	-17	3									
4	-44	4	-43	3	-42	2	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-26	-14	-25	-15	-24	-16	-25	-16	4									
5	-43	5	-42	4	-41	3	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	-34	-4	-33	-5	-32	-6	-31	-7	-30	-8	-29	-9	-28	-10	-27	-11	-26	-12	-25	-13	-24	-14	-25	-13	-24	-14	-23	-15	-24	-15	5									
6	-42	6	-41	5	-40	4	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	-33	-3	-32	-4	-31	-5	-30	-6	-29	-7	-28	-8	-27	-9	-26	-10	-25	-11	-24	-12	-23	-13	-24	-12	-23	-13	-22	-14	-23	-14	6									
7	-41	7	-40	6	-39	5	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	-32	-2	-31	-3	-30	-4	-29	-5	-28	-6	-27	-7	-26	-8	-25	-9	-24	-10	-23	-11	-22	-12	-23	-11	-22	-12	-21	-13	-22	-13	7									
8	-40	8	-39	7	-38	6	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-22	-10	-21	-11	-20	-12	-21	-12	8									
9	-39	9	-38	8	-37	7	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	-30	0	-29	-1	-28	-2	-27	-3	-26	-4	-25	-5	-24	-6	-23	-7	-22	-8	-21	-9	-20	-10	-21	-9	-20	-10	-19	-11	-20	-11	9									
10	-38	10	-37	9	-36	8	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-20	-8	-19	-9	-18	-10	-19	-10	10									
11	-37	11	-36	10	-35	9	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	-28	2	-27	1	-26	0	-25	-1	-24	-2	-23	-3	-22	-4	-21	-5	-20	-6	-19	-7	-18	-8	-19	-7	-18	-8	-17	-9	-18	-9	11									
12	-36	12	-35	11	-34	10	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-18	-6	-17	-7	-16	-8	-17	-8	12									
13	-35	13	-34	12	-33	11	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	-26	4	-25	3	-24	2	-23	1	-22	0	-21	-1	-20	-2	-19	-3	-18	-4	-17	-5	-16	-6	-17	-5	-16	-6	-15	-7	-16	-7	13									
14	-34	14	-33	13	-32	12	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-16	-4	-15	-5	-14	-6	-15	-6	14									
15	-33	15	-32	14	-31	13	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-15	-3	-14	-4	-13	-5	-14	-5	15									
16	-32	16	-31	15	-30	14	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	-23	7	-22	6	-21	5	-20	4	-19	3	-18	2	-17	1	-16	0	-15	-1	-14	-2	-13	-3	-14	-2	-13	-3	-12	-4	-13	-4	16									
17	-31	17	-30	16	-29	15	-28	14	-27	13	-26	12	-25	11	-24	10	-23	9	-22	8	-21	7	-20	6	-19	5	-18	4	-17	3	-16	2	-15	1	-14	0	-13	-1	-12	-2	-11	-3	-12	-2	-11	-3	-11	-3	17									
18	-30	18	-29	17	-28	16	-27	15	-26	14	-25	13	-24	12	-23	11	-22	10	-21	9	-20	8	-19	7	-18	6	-17	5	-16	4	-15	3	-14	2	-13	1	-12	0	-11	-1	-10	-2	-11	-1	-10	-2	-10	-2	18									
19	-29	19	-28	18	-27	17	-26	16	-25	15	-24	14	-23	13	-22	12	-21	11	-20	10	-19	9	-18	8	-17	7	-16	6	-15	5	-14	4	-13	3	-12	2	-11	1	-10	0	-9	-1	-10	0	-9	-1	-9	-1	19									
20	-28	20	-27	19	-26	18	-25	17	-24	16	-23	15	-22	14	-21	13	-20	12	-19	11	-18	10	-17	9	-16	8	-15	7	-14	6	-13	5	-12	4	-11	3	-10	2	-9	1	-8	0	-9	1	-8	0	-8	0	20									
21	-27	21	-26	20	-25	19	-24	18	-23	17	-22	16	-21	15	-20	14	-19	13	-18	12	-17	11	-16	10	-15	9	-14	8	-13	7	-12	6	-11	5	-10	4	-9	3	-8	2	-7	1	-8	2	-7	1	-7	1	21									
22	-26	22	-25	21	-24	20	-23	19	-22	18	-21	17	-20	16	-19	15	-18	14	-17	13	-16	12	-15	11	-14	10	-13	9	-12	8	-11	7	-10	6	-9	5	-8	4	-7	3	-6	2	-6	2	-6	2	-6	2	22									
23	-25	23	-24	22	-23	21	-22	20	-21	19	-20	18	-19	17	-18	16	-17	15	-16	14	-15	13	-14	12	-13	11	-12	10	-11	9	-10	8	-9	7	-8	6	-7	5	-6	4	-5	3	-4	2	-4	2	-4	2	23									
24	-24	24	-23	23	-22	22	-21	21	-20	20	-19	19	-18	18	-17	17	-16	16	-15	15	-14	14	-13	13	-12	12	-11	11	-10	10	-9	9	-8	8	-7	7	-6	6	-5	5	-4	4	-3	3	-3	3	-3	3	24									
25	-23	25	-22	24	-21	23	-20	22	-19	21	-18	20	-17	19	-16	18	-15	17	-14	16	-13	15	-12	14	-11	13	-10	12	-9	11	-8	10	-7	9	-6	8	-5	7	-4	6	-3	5	-2	4	-2	4	-2	4	25									
26	-22	26	-21	25	-20	24	-19	23	-18	22	-17	21	-16	20	-15	19	-14	18	-13	17	-12	16	-11	15	-10	14	-9	13	-8	12	-7	11	-6	10	-5	9	-4	8	-3	7	-2	6	-1	5	-1	5	-1	5	26									
27	-21	27	-20	26	-19	25	-18	24	-17	23	-16	22	-15	21	-14	20	-13	19	-12	18	-11	17	-10	16	-9	15	-8	14	-7	13	-6	12	-5	11	-4	10	-3	9	-2	8	-1	7	0	-1	7	0	-1	7	27									
28	-20	28	-19	27	-18	26	-17	25	-16	24	-15	23	-14	22	-13	21	-12	20	-11	19	-10	18	-9	17	-8	16	-7	15	-6	14	-5	13	-4	12	-3	11	-2	10	-1	9	0	8	0	8	0	8	0	8	0	28								
29	-19	29	-18	28	-17	27	-16	26	-15	25	-14	24	-13	23	-12	22	-11	21	-10	20	-9	19	-8	18	-7	17	-6	16	-5	15	-4	14	-3	13	-2	12	-1	11	0	10	1	9	1	9	1	9	1	9	1	29								
30	-18	30	-17	29	-16	28	-15	27	-14	26	-13	25	-12	24	-11	23	-10	22	-9	21	-8	20	-7	19	-6	18	-5	17	-4	16	-3	15	-2	14	-1	13	0	12	1	11	1	11	1	11	1	11	1	11	1	30								
31	-17	31	-16	30	-15	29	-14	28	-13	27	-12	26	-11	25	-10	24	-9	23	-8	22	-7	21	-6	20	-5	19	-4	18	-3	17	-2	16	-1	15	0	14	1	13	1	13	1	13	1	13	1	13	1	13	1	31								
32	-16	32	-15	31	-14	30	-13	29	-12	28	-11	27	-10	26	-9	25	-8	24	-7	23	-6	22	-5	21	-4	20	-																															

Money 50 Max. value of the production cost: 24
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		
	0.88		0.92		0.96		1.00		
	12%	88%	8%	92%	4%	96%	0%	100%	
	0	-27	-21	-26	-22	-25	-23	-24	
1	-26	-20	-25	-21	-24	-22	-23	-23	1
2	-25	-19	-24	-20	-23	-21	-22	-22	2
3	-24	-18	-23	-19	-22	-20	-21	-21	3
4	-23	-17	-22	-18	-21	-19	-20	-20	4
5	-22	-16	-21	-17	-20	-18	-19	-19	5
6	-21	-15	-20	-16	-19	-17	-18	-18	6
7	-20	-14	-19	-15	-18	-16	-17	-17	7
8	-19	-13	-18	-14	-17	-15	-16	-16	8
9	-18	-12	-17	-13	-16	-14	-15	-15	9
10	-17	-11	-16	-12	-15	-13	-14	-14	10
11	-16	-10	-15	-11	-14	-12	-13	-13	11
12	-15	-9	-14	-10	-13	-11	-12	-12	12
13	-14	-8	-13	-9	-12	-10	-11	-11	13
14	-13	-7	-12	-8	-11	-9	-10	-10	14
15	-12	-6	-11	-7	-10	-8	-9	-9	15
16	-11	-5	-10	-6	-9	-7	-8	-8	16
17	-10	-4	-9	-5	-8	-6	-7	-7	17
18	-9	-3	-8	-4	-7	-5	-6	-6	18
19	-8	-2	-7	-3	-6	-4	-5	-5	19
20	-7	-1	-6	-2	-5	-3	-4	-4	20
21	-6	0	-5	-1	-4	-2	-3	-3	21
22	-5	1	-4	0	-3	-1	-2	-2	22
23	-4	2	-3	1	-2	0	-1	-1	23
24	-3	3	-2	2	-1	1	0	0	24
25	-2	4	-1	3	0	2	1	1	25
26	-1	5	0	4	1	3	2	2	26
27	0	6	1	5	2	4	3	3	27
28	1	7	2	6	3	5	4	4	28
29	2	8	3	7	4	6	5	5	29
30	3	9	4	8	5	7	6	6	30
31	4	10	5	9	6	8	7	7	31
32	5	11	6	10	7	9	8	8	32
33	6	12	7	11	8	10	9	9	33
34	7	13	8	12	9	11	10	10	34
35	8	14	9	13	10	12	11	11	35
36	9	15	10	14	11	13	12	12	36
37	10	16	11	15	12	14	13	13	37
38	11	17	12	16	13	15	14	14	38
39	12	18	13	17	14	16	15	15	39
40	13	19	14	18	15	17	16	16	40
41	14	20	15	19	16	18	17	17	41
42	15	21	16	20	17	19	18	18	42
43	16	22	17	21	18	20	19	19	43
44	17	23	18	22	19	21	20	20	44
45	18	24	19	23	20	22	21	21	45
46	19	25	20	24	21	23	22	22	46
47	20	26	21	25	22	24	23	23	47
48	21	27	22	26	23	25	24	24	48
49	22	28	23	27	24	26	25	25	49
50	23	29	24	28	25	27	26	26	50
51	24	30	25	29	26	28	27	27	51
52	25	31	26	30	27	29	28	28	52
53	26	32	27	31	28	30	29	29	53
54	27	33	28	32	29	31	30	30	54
55	28	34	29	33	30	32	31	31	55
56	29	35	30	34	31	33	32	32	56
57	30	36	31	35	32	34	33	33	57
58	31	37	32	36	33	35	34	34	58

Selling price

Selling price

12%	88%	8%	92%	4%	96%	0%	100%
0.88		0.92		0.96		1.00	
21		22		23		24	

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Money 100 Max. value of the production cost: 24

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.04		0.08		0.13		0.17		0.21		0.25		0.29		0.33		0.38		0.42		0.46		0.50		0.54		0.58		0.63		0.67		0.71		0.75		0.79		0.83		
	100%	0%	96%	4%	92%	8%	87%	13%	83%	17%	79%	21%	75%	25%	71%	29%	67%	33%	62%	38%	58%	42%	54%	46%	50%	50%	46%	54%	42%	58%	37%	63%	33%	67%	29%	71%	25%	75%	21%	79%	17%	83%	
0	-48	0	-47	-1	-46	-2	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	-39	-9	-38	-10	-37	-11	-36	-12	-35	-13	-34	-14	-33	-15	-32	-16	-31	-17	-30	-18	-29	-19	-28	-20	0
1	-47	1	-46	0	-45	-1	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	-38	-8	-37	-9	-36	-10	-35	-11	-34	-12	-33	-13	-32	-14	-31	-15	-30	-16	-29	-17	-28	-18	-27	-19	1
2	-46	2	-45	1	-44	0	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	-37	-7	-36	-8	-35	-9	-34	-10	-33	-11	-32	-12	-31	-13	-30	-14	-29	-15	-28	-16	-27	-17	-26	-18	2
3	-45	3	-44	2	-43	1	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-25	-17	3
4	-44	4	-43	3	-42	2	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-24	-16	4
5	-43	5	-42	4	-41	3	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	-34	-4	-33	-5	-32	-6	-31	-7	-30	-8	-29	-9	-28	-10	-27	-11	-26	-12	-25	-13	-24	-14	-23	-15	5
6	-42	6	-41	5	-40	4	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	-33	-3	-32	-4	-31	-5	-30	-6	-29	-7	-28	-8	-27	-9	-26	-10	-25	-11	-24	-12	-23	-13	-22	-14	6
7	-41	7	-40	6	-39	5	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	-32	-2	-31	-3	-30	-4	-29	-5	-28	-6	-27	-7	-26	-8	-25	-9	-24	-10	-23	-11	-22	-12	-21	-13	7
8	-40	8	-39	7	-38	6	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-20	-12	8
9	-39	9	-38	8	-37	7	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	-30	0	-29	-1	-28	-2	-27	-3	-26	-4	-25	-5	-24	-6	-23	-7	-22	-8	-21	-9	-20	-10	-19	-11	9
10	-38	10	-37	9	-36	8	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-18	-10	10
11	-37	11	-36	10	-35	9	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	-28	2	-27	1	-26	0	-25	-1	-24	-2	-23	-3	-22	-4	-21	-5	-20	-6	-19	-7	-18	-8	-17	-9	11
12	-36	12	-35	11	-34	10	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-16	-8	12
13	-35	13	-34	12	-33	11	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	-26	4	-25	3	-24	2	-23	1	-22	0	-21	-1	-20	-2	-19	-3	-18	-4	-17	-5	-16	-6	-15	-7	13
14	-34	14	-33	13	-32	12	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-14	-6	14
15	-33	15	-32	14	-31	13	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-13	-5	15
16	-32	16	-31	15	-30	14	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	-23	7	-22	6	-21	5	-20	4	-19	3	-18	2	-17	1	-16	0	-15	-1	-14	-2	-13	-3	-12	-4	16
17	-31	17	-30	16	-29	15	-28	14	-27	13	-26	12	-25	11	-24	10	-23	9	-22	8	-21	7	-20	6	-19	5	-18	4	-17	3	-16	2	-15	1	-14	0	-13	-1	-12	-2	-11	-3	17
18	-30	18	-29	17	-28	16	-27	15	-26	14	-25	13	-24	12	-23	11	-22	10	-21	9	-20	8	-19	7	-18	6	-17	5	-16	4	-15	3	-14	2	-13	1	-12	0	-11	-1	-10	-2	18
19	-29	19	-28	18	-27	17	-26	16	-25	15	-24	14	-23	13	-22	12	-21	11	-20	10	-19	9	-18	8	-17	7	-16	6	-15	5	-14	4	-13	3	-12	2	-11	1	-10	0	-9	-1	19
20	-28	20	-27	19	-26	18	-25	17	-24	16	-23	15	-22	14	-21	13	-20	12	-19	11	-18	10	-17	9	-16	8	-15	7	-14	6	-13	5	-12	4	-11	3	-10	2	-9	1	-8	0	20
21	-27	21	-26	20	-25	19	-24	18	-23	17	-22	16	-21	15	-20	14	-19	13	-18	12	-17	11	-16	10	-15	9	-14	8	-13	7	-12	6	-11	5	-10	4	-9	3	-8	2	-7	1	21
22	-26	22	-25	21	-24	20	-23	19	-22	18	-21	17	-20	16	-19	15	-18	14	-17	13	-16	12	-15	11	-14	10	-13	9	-12	8	-11	7	-10	6	-9	5	-8	4	-7	3	-6	2	22
23	-25	23	-24	22	-23	21	-22	20	-21	19	-20	18	-19	17	-18	16	-17	15	-16	14	-15	13	-14	12	-13	11	-12	10	-11	9	-10	8	-9	7	-8	6	-7	5	-6	4	-5	3	23
24	-24	24	-23	23	-22	22	-21	21	-20	20	-19	19	-18	18	-17	17	-16	16	-15	15	-14	14	-13	13	-12	12	-11	11	-10	10	-9	9	-8	8	-7	7	-6	6	-5	5	-4	4	24
25	-23	25	-22	24	-21	23	-20	22	-19	21	-18	20	-17	19	-16	18	-15	17	-14	16	-13	15	-12	14	-11	13	-10	12	-9	11	-8	10	-7	9	-6	8	-5	7	-4	6	-3	5	25
26	-22	26	-21	25	-20	24	-19	23	-18	22	-17	21	-16	20	-15	19	-14	18	-13	17	-12	16	-11	15	-10	14	-9	13	-8	12	-7	11	-6	10	-5	9	-4	8	-3	7	-2	6	26
27	-21	27	-20	26	-19	25	-18	24	-17	23	-16	22	-15	21	-14	20	-13	19	-12	18	-11	17	-10	16	-9	15	-8	14	-7	13	-6	12	-5	11	-4	10	-3	9	-2	8	-1	7	27
28	-20	28	-19	27	-18	26	-17	25	-16	24	-15	23	-14	22	-13	21	-12	20	-11	19	-10	18	-9	17	-8	16	-7	15	-6	14	-5	13	-4	12	-3	11	-2	10	-1	9	0	8	28
29	-19	29	-18	28	-17	27	-16	26	-15	25	-14	24	-13	23	-12	22	-11	21	-10	20	-9	19	-8	18	-7	17	-6	16	-5	15	-4	14	-3	13	-2	12	-1	11	0	10	1	9	29
30	-18	30	-17	29	-16	28	-15	27	-14	26	-13	25	-12	24	-11	23	-10	22	-9	21	-8	20	-7	19	-6	18	-5	17	-4	16	-3	15	-2	14	-1	13	0	12	1	11	2	10	30
31	-17	31	-16	30	-15	29	-14	28	-13	27	-12	26	-11	25	-10	24	-9	23	-8	22	-7	21	-6	20	-5	19	-4	18	-3	17	-2	16	-1	15	0	14	1	13	2	12	3	11	31
32	-16	32	-15	31	-14	30	-13	29	-12	28	-11	27	-10	26	-9	25	-8	24	-7	23	-6	22	-5	21	-4	20	-3	19	-2	18	-1	17	0	16	1	15	2	14	3	13	4	12	32
33	-15	33	-14	32	-13	31	-12	30	-11	29	-10	28	-9	27	-8	26	-7	25	-6	24	-5	23	-4	22	-3	21	-2	20	-1	19	0	18	1	17	2	16	3	15	4	14	5	13	33
34	-14	34	-13	33	-12	32	-11	31	-10	30	-9	29	-8	28	-7	27	-6	26	-5	25	-4	24	-3	23	-2	22	-1	21	0	20	1	19	2	18	3	17	4	16	5	15	6	14	34
35	-13	35	-12	34	-11	33	-10	32	-9	31	-8	30	-7	29	-6	28	-5	27	-4	26	-3	25	-2	24	-1	23	0	22	1	21	2	20	3	19	4	18	5	17	6	16	7	15	35
36	-12	36	-11	35	-10	34	-9	33	-8	32	-7	31	-6	30	-5	29	-4	28	-3	27	-2	26	-1	25	0	24	1	23	2	22	3	21	4	20	5	19	6	18	7	17	8	16	36
37	-11	37	-10	36	-9	35	-8	34	-7	33	-6	32	-5	31	-4	30	-3	29	-2	28	-1	27	0	26	1	25	2	24	3	23	4	22	5	21	6	20	7	19	8	18	9	17	37
38	-10	38	-9	37	-8	36	-7	35	-6																																		

Money 100 Max. value of the production cost: 24
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		
	0.88		0.92		0.96		1.00		
	12%	88%	8%	92%	4%	96%	0%	100%	
	0	-27	-21	-26	-22	-25	-23	-24	
1	-26	-20	-25	-21	-24	-22	-23	-23	1
2	-25	-19	-24	-20	-23	-21	-22	-22	2
3	-24	-18	-23	-19	-22	-20	-21	-21	3
4	-23	-17	-22	-18	-21	-19	-20	-20	4
5	-22	-16	-21	-17	-20	-18	-19	-19	5
6	-21	-15	-20	-16	-19	-17	-18	-18	6
7	-20	-14	-19	-15	-18	-16	-17	-17	7
8	-19	-13	-18	-14	-17	-15	-16	-16	8
9	-18	-12	-17	-13	-16	-14	-15	-15	9
10	-17	-11	-16	-12	-15	-13	-14	-14	10
11	-16	-10	-15	-11	-14	-12	-13	-13	11
12	-15	-9	-14	-10	-13	-11	-12	-12	12
13	-14	-8	-13	-9	-12	-10	-11	-11	13
14	-13	-7	-12	-8	-11	-9	-10	-10	14
15	-12	-6	-11	-7	-10	-8	-9	-9	15
16	-11	-5	-10	-6	-9	-7	-8	-8	16
17	-10	-4	-9	-5	-8	-6	-7	-7	17
18	-9	-3	-8	-4	-7	-5	-6	-6	18
19	-8	-2	-7	-3	-6	-4	-5	-5	19
20	-7	-1	-6	-2	-5	-3	-4	-4	20
21	-6	0	-5	-1	-4	-2	-3	-3	21
22	-5	1	-4	0	-3	-1	-2	-2	22
23	-4	2	-3	1	-2	0	-1	-1	23
24	-3	3	-2	2	-1	1	0	0	24
25	-2	4	-1	3	0	2	1	1	25
26	-1	5	0	4	1	3	2	2	26
27	0	6	1	5	2	4	3	3	27
28	1	7	2	6	3	5	4	4	28
29	2	8	3	7	4	6	5	5	29
30	3	9	4	8	5	7	6	6	30
31	4	10	5	9	6	8	7	7	31
32	5	11	6	10	7	9	8	8	32
33	6	12	7	11	8	10	9	9	33
34	7	13	8	12	9	11	10	10	34
35	8	14	9	13	10	12	11	11	35
36	9	15	10	14	11	13	12	12	36
37	10	16	11	15	12	14	13	13	37
38	11	17	12	16	13	15	14	14	38
39	12	18	13	17	14	16	15	15	39
40	13	19	14	18	15	17	16	16	40
41	14	20	15	19	16	18	17	17	41
42	15	21	16	20	17	19	18	18	42
43	16	22	17	21	18	20	19	19	43
44	17	23	18	22	19	21	20	20	44
45	18	24	19	23	20	22	21	21	45
46	19	25	20	24	21	23	22	22	46
47	20	26	21	25	22	24	23	23	47
48	21	27	22	26	23	25	24	24	48
49	22	28	23	27	24	26	25	25	49
50	23	29	24	28	25	27	26	26	50
51	24	30	25	29	26	28	27	27	51
52	25	31	26	30	27	29	28	28	52
53	26	32	27	31	28	30	29	29	53
54	27	33	28	32	29	31	30	30	54
55	28	34	29	33	30	32	31	31	55
56	29	35	30	34	31	33	32	32	56
57	30	36	31	35	32	34	33	33	57
58	31	37	32	36	33	35	34	34	58

Selling price

Selling price

12% 88% 8% 92% 4% 96% 0% 100%
 0.88 0.92 0.96 1.00
 21 22 23 24
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Money 0 Max. value of the production cost: 30

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20			
	0.00		0.03		0.07		0.10		0.13		0.17		0.20		0.23		0.27		0.30		0.33		0.37		0.40		0.43		0.47		0.50		0.53		0.57		0.60		0.63		0.67			
	100%	0%	97%	3%	93%	7%	90%	10%	87%	13%	83%	17%	80%	20%	77%	23%	73%	27%	70%	30%	67%	33%	63%	37%	60%	40%	57%	43%	53%	47%	50%	50%	47%	53%	43%	57%	40%	60%	37%	63%	33%	67%		
0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
3	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
4	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
5	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	
6	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	
7	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	
8	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	
9	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	
10	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	
11	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	
12	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	
13	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	
14	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	14	
15	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	15	
16	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	16	
17	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	17	
18	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	18	
19	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	19	
20	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	20	
21	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	21	
22	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	22		
23	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	23	
24	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	24	
25	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	25	
26	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	26	
27	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	27	
28	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	28	
29	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	29	
30	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	30	
31	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	31	
32	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	32	
33	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	33	
34	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	34	
35	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	35	
36	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	36	
37	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	37	
38	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	38	
39	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	39	
40	0	40	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	40	
41	0	41	0	40	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28</																

Money 0 Max. value of the production cost: 30
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		25		26		27		28		29		30		
	0.70		0.73		0.77		0.80		0.83		0.87		0.90		0.93		0.97		1.00		
	30%	70%	27%	73%	23%	77%	20%	80%	17%	83%	13%	87%	10%	90%	7%	93%	3%	97%	0%	100%	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
21	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21
22	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
23	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
24	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	24
25	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	25
26	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	26
27	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	27
28	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	28
29	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	29
30	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	30
31	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	1	1	31
32	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	1	3	2	2	32
33	0	12	0	11	0	10	0	9	0	8	0	7	0	6	1	5	2	4	3	3	33
34	0	13	0	12	0	11	0	10	0	9	0	8	1	7	2	6	3	5	4	4	34
35	0	14	0	13	0	12	0	11	0	10	1	9	2	8	3	7	4	6	5	5	35
36	0	15	0	14	0	13	0	12	1	11	2	10	3	9	4	8	5	7	6	6	36
37	0	16	0	15	0	14	1	13	2	12	3	11	4	10	5	9	6	8	7	7	37
38	0	17	0	16	1	15	2	14	3	13	4	12	5	11	6	10	7	9	8	8	38
39	0	18	1	17	2	16	3	15	4	14	5	13	6	12	7	11	8	10	9	9	39
40	1	19	2	18	3	17	4	16	5	15	6	14	7	13	8	12	9	11	10	10	40
41	2	20	3	19	4	18	5	17	6	16	7	15	8	14	9	13	10	12	11	11	41
42	3	21	4	20	5	19	6	18	7	17	8	16	9	15	10	14	11	13	12	12	42
43	4	22	5	21	6	20	7	19	8	18	9	17	10	16	11	15	12	14	13	13	43
44	5	23	6	22	7	21	8	20	9	19	10	18	11	17	12	16	13	15	14	14	44
45	6	24	7	23	8	22	9	21	10	20	11	19	12	18	13	17	14	16	15	15	45
46	7	25	8	24	9	23	10	22	11	21	12	20	13	19	14	18	15	17	16	16	46
47	8	26	9	25	10	24	11	23	12	22	13	21	14	20	15	19	16	18	17	17	47
48	9	27	10	26	11	25	12	24	13	23	14	22	15	21	16	20	17	19	18	18	48
49	10	28	11	27	12	26	13	25	14	24	15	23	16	22	17	21	18	20	19	19	49
50	11	29	12	28	13	27	14	26	15	25	16	24	17	23	18	22	19	21	20	20	50
51	12	30	13	29	14	28	15	27	16	26	17	25	18	24	19	23	20	22	21	21	51
52	13	31	14	30	15	29	16	28	17	27	18	26	19	25	20	24	21	23	22	22	52
53	14	32	15	31	16	30	17	29	18	28	19	27	20	26	21	25	22	24	23	23	53
54	15	33	16	32	17	31	18	30	19	29	20	28	21	27	22	26	23	25	24	24	54
55	16	34	17	33	18	32	19	31	20	30	21	29	22	28	23	27	24	26	25	25	55
56	17	35	18	34	19	33	20	32	21	31	22	30	23	29	24	28	25	27	26	26	56
57	18	36	19	35	20	34	21	33	22	32	23	31	24	30	25	29	26	28	27	27	57
58	19	37	20	36	21	35	22	34	23	33	24	32	25	31	26	30	27	29	28	28	58

Selling price

Selling price

30% 70% 27% 73% 23% 77% 20% 80% 17% 83% 13% 87% 10% 90% 7% 93% 3% 97% 0% 100%
 0.70 0.73 0.77 0.80 0.83 0.87 0.90 0.93 0.97 1.00
 21 22 23 24 25 26 27 28 29 30
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Money 50

Max. value of the production cost: 30

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.03		0.07		0.10		0.13		0.17		0.20		0.23		0.27		0.30		0.33		0.37		0.40		0.43		0.47		0.50		0.53		0.57		0.60		0.63		0.67		
	100%	0%	97%	3%	93%	7%	90%	10%	87%	13%	83%	17%	80%	20%	77%	23%	73%	27%	70%	30%	67%	33%	63%	37%	60%	40%	57%	43%	53%	47%	50%	50%	47%	53%	43%	57%	40%	60%	37%	63%	33%	67%	
0	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-49	-11	-48	-12	-47	-13	-46	-14	-45	-15	-44	-16	-43	-17	-42	-18	-41	-19	-40	-20	0
1	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-49	-9	-48	-10	-47	-11	-46	-12	-45	-13	-44	-14	-43	-15	-42	-16	-41	-17	-40	-18	-39	-19	1
2	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-49	-7	-48	-8	-47	-9	-46	-10	-45	-11	-44	-12	-43	-13	-42	-14	-41	-15	-40	-16	-39	-17	-38	-18	2
3	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-49	-5	-48	-6	-47	-7	-46	-8	-45	-9	-44	-10	-43	-11	-42	-12	-41	-13	-40	-14	-39	-15	-38	-16	-37	-17	3
4	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-49	-3	-48	-4	-47	-5	-46	-6	-45	-7	-44	-8	-43	-9	-42	-10	-41	-11	-40	-12	-39	-13	-38	-14	-37	-15	-36	-16	4
5	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-49	-1	-48	-2	-47	-3	-46	-4	-45	-5	-44	-6	-43	-7	-42	-8	-41	-9	-40	-10	-39	-11	-38	-12	-37	-13	-36	-14	-35	-15	5
6	-50	6	-50	5	-50	4	-50	3	-50	2	-49	1	-48	0	-47	-1	-46	-2	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	-39	-9	-38	-10	-37	-11	-36	-12	-35	-13	-34	-14	6
7	-50	7	-50	6	-50	5	-50	4	-49	3	-48	2	-47	1	-46	0	-45	-1	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	-38	-8	-37	-9	-36	-10	-35	-11	-34	-12	-33	-13	7
8	-50	8	-50	7	-50	6	-49	5	-48	4	-47	3	-46	2	-45	1	-44	0	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	-37	-7	-36	-8	-35	-9	-34	-10	-33	-11	-32	-12	8
9	-50	9	-50	8	-49	7	-48	6	-47	5	-46	4	-45	3	-44	2	-43	1	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	9
10	-50	10	-49	9	-48	8	-47	7	-46	6	-45	5	-44	4	-43	3	-42	2	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	10
11	-49	11	-48	10	-47	9	-46	8	-45	7	-44	6	-43	5	-42	4	-41	3	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	-34	-4	-33	-5	-32	-6	-31	-7	-30	-8	-29	-9	11
12	-48	12	-47	11	-46	10	-45	9	-44	8	-43	7	-42	6	-41	5	-40	4	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	-33	-3	-32	-4	-31	-5	-30	-6	-29	-7	-28	-8	12
13	-47	13	-46	12	-45	11	-44	10	-43	9	-42	8	-41	7	-40	6	-39	5	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	-32	-2	-31	-3	-30	-4	-29	-5	-28	-6	-27	-7	13
14	-46	14	-45	13	-44	12	-43	11	-42	10	-41	9	-40	8	-39	7	-38	6	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	14
15	-45	15	-44	14	-43	13	-42	12	-41	11	-40	10	-39	9	-38	8	-37	7	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	-30	0	-29	-1	-28	-2	-27	-3	-26	-4	-25	-5	15
16	-44	16	-43	15	-42	14	-41	13	-40	12	-39	11	-38	10	-37	9	-36	8	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	16
17	-43	17	-42	16	-41	15	-40	14	-39	13	-38	12	-37	11	-36	10	-35	9	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	-28	2	-27	1	-26	0	-25	-1	-24	-2	-23	-3	17
18	-42	18	-41	17	-40	16	-39	15	-38	14	-37	13	-36	12	-35	11	-34	10	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	18
19	-41	19	-40	18	-39	17	-38	16	-37	15	-36	14	-35	13	-34	12	-33	11	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	-26	4	-25	3	-24	2	-23	1	-22	0	-21	-1	19
20	-40	20	-39	19	-38	18	-37	17	-36	16	-35	15	-34	14	-33	13	-32	12	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	20
21	-39	21	-38	20	-37	19	-36	18	-35	17	-34	16	-33	15	-32	14	-31	13	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	21
22	-38	22	-37	21	-36	20	-35	19	-34	18	-33	17	-32	16	-31	15	-30	14	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	-23	7	-22	6	-21	5	-20	4	-19	3	-18	2	22
23	-37	23	-36	22	-35	21	-34	20	-33	19	-32	18	-31	17	-30	16	-29	15	-28	14	-27	13	-26	12	-25	11	-24	10	-23	9	-22	8	-21	7	-20	6	-19	5	-18	4	-17	3	23
24	-36	24	-35	23	-34	22	-33	21	-32	20	-31	19	-30	18	-29	17	-28	16	-27	15	-26	14	-25	13	-24	12	-23	11	-22	10	-21	9	-20	8	-19	7	-18	6	-17	5	-16	4	24
25	-35	25	-34	24	-33	23	-32	22	-31	21	-30	20	-29	19	-28	18	-27	17	-26	16	-25	15	-24	14	-23	13	-22	12	-21	11	-20	10	-19	9	-18	8	-17	7	-16	6	-15	5	25
26	-34	26	-33	25	-32	24	-31	23	-30	22	-29	21	-28	20	-27	19	-26	18	-25	17	-24	16	-23	15	-22	14	-21	13	-20	12	-19	11	-18	10	-17	9	-16	8	-15	7	-14	6	26
27	-33	27	-32	26	-31	25	-30	24	-29	23	-28	22	-27	21	-26	20	-25	19	-24	18	-23	17	-22	16	-21	15	-20	14	-19	13	-18	12	-17	11	-16	10	-15	9	-14	8	-13	7	27
28	-32	28	-31	27	-30	26	-29	25	-28	24	-27	23	-26	22	-25	21	-24	20	-23	19	-22	18	-21	17	-20	16	-19	15	-18	14	-17	13	-16	12	-15	11	-14	10	-13	9	-12	8	28
29	-31	29	-30	28	-29	27	-28	26	-27	25	-26	24	-25	23	-24	22	-23	21	-22	20	-21	19	-20	18	-19	17	-18	16	-17	15	-16	14	-15	13	-14	12	-13	11	-12	10	-11	9	29
30	-30	30	-29	29	-28	28	-27	27	-26	26	-25	25	-24	24	-23	23	-22	22	-21	21	-20	20	-19	19	-18	18	-17	17	-16	16	-15	15	-14	14	-13	13	-12	12	-11	11	-10	10	30
31	-29	31	-28	30	-27	29	-26	28	-25	27	-24	26	-23	25	-22	24	-21	23	-20	22	-19	21	-18	20	-17	19	-16	18	-15	17	-14	16	-13	15	-12	14	-11	13	-10	12	-9	11	31
32	-28	32	-27	31	-26	30	-25	29	-24	28	-23	27	-22	26	-21	25	-20	24	-19	23	-18	22	-17	21	-16	20	-15	19	-14	18	-13	17	-12	16	-11	15	-10	14	-9	13	-8	12	32
33	-27	33	-26	32	-25	31	-24	30	-23	29	-22	28	-21	27	-20	26	-19	25	-18	24	-17	23	-16	22	-15	21	-14	20	-13	19	-12	18	-11	17	-10	16	-9	15	-8	14	-7	13	33
34	-26	34	-25	33	-24	32	-23	31	-22	30	-21	29	-20	28	-19	27	-18	26	-17	25	-16	24	-15	23	-14	22	-13	21	-12	20	-11	19	-10	18	-9	17	-8	16	-7	15	-6	14	34
35	-25	35	-24	34	-23	33	-22	32	-21	31	-20	30	-19	29	-18	28	-17	27	-16	26	-15	25	-14	24	-13	23	-12	22	-11	21	-10	20	-9	19	-8	18	-7	17	-6	16	-5	15	35
36	-24	36	-23	35	-22	34	-21	33	-20	32	-19	31	-18	30	-17	29	-16	28	-15	27	-14	26	-13	25	-12	24	-11	23	-10	22	-9	21	-8	20	-7	19	-6	18	-5	17	-4	16	36
37	-23	37	-22	36	-21	35	-20	34	-19	33	-18	32	-17	31	-16	30	-15	29	-14	28	-13	27	-12	26	-																		

Money 50 Max. value of the production cost: 30
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		25		26		27		28		29		30		
	0.70		0.73		0.77		0.80		0.83		0.87		0.90		0.93		0.97		1.00		
	30%	70%	27%	73%	23%	77%	20%	80%	17%	83%	13%	87%	10%	90%	7%	93%	3%	97%	0%	100%	
0	-39	-21	-38	-22	-37	-23	-36	-24	-35	-25	-34	-26	-33	-27	-32	-28	-31	-29	-30	-30	0
1	-38	-20	-37	-21	-36	-22	-35	-23	-34	-24	-33	-25	-32	-26	-31	-27	-30	-28	-29	-29	1
2	-37	-19	-36	-20	-35	-21	-34	-22	-33	-23	-32	-24	-31	-25	-30	-26	-29	-27	-28	-28	2
3	-36	-18	-35	-19	-34	-20	-33	-21	-32	-22	-31	-23	-30	-24	-29	-25	-28	-26	-27	-27	3
4	-35	-17	-34	-18	-33	-19	-32	-20	-31	-21	-30	-22	-29	-23	-28	-24	-27	-25	-26	-26	4
5	-34	-16	-33	-17	-32	-18	-31	-19	-30	-20	-29	-21	-28	-22	-27	-23	-26	-24	-25	-25	5
6	-33	-15	-32	-16	-31	-17	-30	-18	-29	-19	-28	-20	-27	-21	-26	-22	-25	-23	-24	-24	6
7	-32	-14	-31	-15	-30	-16	-29	-17	-28	-18	-27	-19	-26	-20	-25	-21	-24	-22	-23	-23	7
8	-31	-13	-30	-14	-29	-15	-28	-16	-27	-17	-26	-18	-25	-19	-24	-20	-23	-21	-22	-22	8
9	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-25	-17	-24	-18	-23	-19	-22	-20	-21	-21	9
10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-24	-16	-23	-17	-22	-18	-21	-19	-20	-20	10
11	-28	-10	-27	-11	-26	-12	-25	-13	-24	-14	-23	-15	-22	-16	-21	-17	-20	-18	-19	-19	11
12	-27	-9	-26	-10	-25	-11	-24	-12	-23	-13	-22	-14	-21	-15	-20	-16	-19	-17	-18	-18	12
13	-26	-8	-25	-9	-24	-10	-23	-11	-22	-12	-21	-13	-20	-14	-19	-15	-18	-16	-17	-17	13
14	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-20	-12	-19	-13	-18	-14	-17	-15	-16	-16	14
15	-24	-6	-23	-7	-22	-8	-21	-9	-20	-10	-19	-11	-18	-12	-17	-13	-16	-14	-15	-15	15
16	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-18	-10	-17	-11	-16	-12	-15	-13	-14	-14	16
17	-22	-4	-21	-5	-20	-6	-19	-7	-18	-8	-17	-9	-16	-10	-15	-11	-14	-12	-13	-13	17
18	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-16	-8	-15	-9	-14	-10	-13	-11	-12	-12	18
19	-20	-2	-19	-3	-18	-4	-17	-5	-16	-6	-15	-7	-14	-8	-13	-9	-12	-10	-11	-11	19
20	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-14	-6	-13	-7	-12	-8	-11	-9	-10	-10	20
21	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-13	-5	-12	-6	-11	-7	-10	-8	-9	-9	21
22	-17	1	-16	0	-15	-1	-14	-2	-13	-3	-12	-4	-11	-5	-10	-6	-9	-7	-8	-8	22
23	-16	2	-15	1	-14	0	-13	-1	-12	-2	-11	-3	-10	-4	-9	-5	-8	-6	-7	-7	23
24	-15	3	-14	2	-13	1	-12	0	-11	-1	-10	-2	-9	-3	-8	-4	-7	-5	-6	-6	24
25	-14	4	-13	3	-12	2	-11	1	-10	0	-9	-1	-8	-2	-7	-3	-6	-4	-5	-5	25
26	-13	5	-12	4	-11	3	-10	2	-9	1	-8	0	-7	-1	-6	-2	-5	-3	-4	-4	26
27	-12	6	-11	5	-10	4	-9	3	-8	2	-7	1	-6	0	-5	-1	-4	-2	-3	-3	27
28	-11	7	-10	6	-9	5	-8	4	-7	3	-6	2	-5	1	-4	0	-3	-1	-2	-2	28
29	-10	8	-9	7	-8	6	-7	5	-6	4	-5	3	-4	2	-3	1	-2	0	-1	-1	29
30	-9	9	-8	8	-7	7	-6	6	-5	5	-4	4	-3	3	-2	2	-1	1	0	0	30
31	-8	10	-7	9	-6	8	-5	7	-4	6	-3	5	-2	4	-1	3	0	2	1	1	31
32	-7	11	-6	10	-5	9	-4	8	-3	7	-2	6	-1	5	0	4	1	3	2	2	32
33	-6	12	-5	11	-4	10	-3	9	-2	8	-1	7	0	6	1	5	2	4	3	3	33
34	-5	13	-4	12	-3	11	-2	10	-1	9	0	8	1	7	2	6	3	5	4	4	34
35	-4	14	-3	13	-2	12	-1	11	0	10	1	9	2	8	3	7	4	6	5	5	35
36	-3	15	-2	14	-1	13	0	12	1	11	2	10	3	9	4	8	5	7	6	6	36
37	-2	16	-1	15	0	14	1	13	2	12	3	11	4	10	5	9	6	8	7	7	37
38	-1	17	0	16	1	15	2	14	3	13	4	12	5	11	6	10	7	9	8	8	38
39	0	18	1	17	2	16	3	15	4	14	5	13	6	12	7	11	8	10	9	9	39
40	1	19	2	18	3	17	4	16	5	15	6	14	7	13	8	12	9	11	10	10	40
41	2	20	3	19	4	18	5	17	6	16	7	15	8	14	9	13	10	12	11	11	41
42	3	21	4	20	5	19	6	18	7	17	8	16	9	15	10	14	11	13	12	12	42
43	4	22	5	21	6	20	7	19	8	18	9	17	10	16	11	15	12	14	13	13	43
44	5	23	6	22	7	21	8	20	9	19	10	18	11	17	12	16	13	15	14	14	44
45	6	24	7	23	8	22	9	21	10	20	11	19	12	18	13	17	14	16	15	15	45
46	7	25	8	24	9	23	10	22	11	21	12	20	13	19	14	18	15	17	16	16	46
47	8	26	9	25	10	24	11	23	12	22	13	21	14	20	15	19	16	18	17	17	47
48	9	27	10	26	11	25	12	24	13	23	14	22	15	21	16	20	17	19	18	18	48
49	10	28	11	27	12	26	13	25	14	24	15	23	16	22	17	21	18	20	19	19	49
50	11	29	12	28	13	27	14	26	15	25	16	24	17	23	18	22	19	21	20	20	50
51	12	30	13	29	14	28	15	27	16	26	17	25	18	24	19	23	20	22	21	21	51
52	13	31	14	30	15	29	16	28	17	27	18	26	19	25	20	24	21	23	22	22	52
53	14	32	15	31	16	30	17	29	18	28	19	27	20	26	21	25	22	24	23	23	53
54	15	33	16	32	17	31	18	30	19	29	20	28	21	27	22	26	23	25	24	24	54
55	16	34	17	33	18	32	19	31	20	30	21	29	22	28	23	27	24	26	25	25	55
56	17	35	18	34	19	33	20	32	21	31	22	30	23	29	24	28	25	27	26	26	56
57	18	36	19	35	20	34	21	33	22	32	23	31	24	30	25	29	26	28	27	27	57
58	19	37	20	36	21	35	22	34	23	33	24	32	25	31	26	30	27	29	28	28	58

Selling price

Selling price

30% 70% 27% 73% 23% 77% 20% 80% 17% 83% 13% 87% 10% 90% 7% 93% 3% 97% 0% 100%
 0.70 0.73 0.77 0.80 0.83 0.87 0.90 0.93 0.97 1.00
 21 22 23 24 25 26 27 28 29 30
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Money 100 Max. value of the production cost: 30

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.03		0.07		0.10		0.13		0.17		0.20		0.23		0.27		0.30		0.33		0.37		0.40		0.43		0.47		0.50		0.53		0.57		0.60		0.63		0.67		
	100%	0%	97%	3%	93%	7%	90%	10%	87%	13%	83%	17%	80%	20%	77%	23%	73%	27%	70%	30%	67%	33%	63%	37%	60%	40%	57%	43%	53%	47%	50%	50%	47%	53%	43%	57%	40%	60%	37%	63%	33%	67%	
0	-60	0	-59	-1	-58	-2	-57	-3	-56	-4	-55	-5	-54	-6	-53	-7	-52	-8	-51	-9	-50	-10	-49	-11	-48	-12	-47	-13	-46	-14	-45	-15	-44	-16	-43	-17	-42	-18	-41	-19	-40	-20	0
1	-59	1	-58	0	-57	-1	-56	-2	-55	-3	-54	-4	-53	-5	-52	-6	-51	-7	-50	-8	-49	-9	-48	-10	-47	-11	-46	-12	-45	-13	-44	-14	-43	-15	-42	-16	-41	-17	-40	-18	-39	-19	1
2	-58	2	-57	1	-56	0	-55	-1	-54	-2	-53	-3	-52	-4	-51	-5	-50	-6	-49	-7	-48	-8	-47	-9	-46	-10	-45	-11	-44	-12	-43	-13	-42	-14	-41	-15	-40	-16	-39	-17	-38	-18	2
3	-57	3	-56	2	-55	1	-54	0	-53	-1	-52	-2	-51	-3	-50	-4	-49	-5	-48	-6	-47	-7	-46	-8	-45	-9	-44	-10	-43	-11	-42	-12	-41	-13	-40	-14	-39	-15	-38	-16	-37	-17	3
4	-56	4	-55	3	-54	2	-53	1	-52	0	-51	-1	-50	-2	-49	-3	-48	-4	-47	-5	-46	-6	-45	-7	-44	-8	-43	-9	-42	-10	-41	-11	-40	-12	-39	-13	-38	-14	-37	-15	-36	-16	4
5	-55	5	-54	4	-53	3	-52	2	-51	1	-50	0	-49	-1	-48	-2	-47	-3	-46	-4	-45	-5	-44	-6	-43	-7	-42	-8	-41	-9	-40	-10	-39	-11	-38	-12	-37	-13	-36	-14	-35	-15	5
6	-54	6	-53	5	-52	4	-51	3	-50	2	-49	1	-48	0	-47	-1	-46	-2	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	-39	-9	-38	-10	-37	-11	-36	-12	-35	-13	-34	-14	6
7	-53	7	-52	6	-51	5	-50	4	-49	3	-48	2	-47	1	-46	0	-45	-1	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	-38	-8	-37	-9	-36	-10	-35	-11	-34	-12	-33	-13	7
8	-52	8	-51	7	-50	6	-49	5	-48	4	-47	3	-46	2	-45	1	-44	0	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	-37	-7	-36	-8	-35	-9	-34	-10	-33	-11	-32	-12	8
9	-51	9	-50	8	-49	7	-48	6	-47	5	-46	4	-45	3	-44	2	-43	1	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	9
10	-50	10	-49	9	-48	8	-47	7	-46	6	-45	5	-44	4	-43	3	-42	2	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	10
11	-49	11	-48	10	-47	9	-46	8	-45	7	-44	6	-43	5	-42	4	-41	3	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	-34	-4	-33	-5	-32	-6	-31	-7	-30	-8	-29	-9	11
12	-48	12	-47	11	-46	10	-45	9	-44	8	-43	7	-42	6	-41	5	-40	4	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	-33	-3	-32	-4	-31	-5	-30	-6	-29	-7	-28	-8	12
13	-47	13	-46	12	-45	11	-44	10	-43	9	-42	8	-41	7	-40	6	-39	5	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	-32	-2	-31	-3	-30	-4	-29	-5	-28	-6	-27	-7	13
14	-46	14	-45	13	-44	12	-43	11	-42	10	-41	9	-40	8	-39	7	-38	6	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	14
15	-45	15	-44	14	-43	13	-42	12	-41	11	-40	10	-39	9	-38	8	-37	7	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	-30	0	-29	-1	-28	-2	-27	-3	-26	-4	-25	-5	15
16	-44	16	-43	15	-42	14	-41	13	-40	12	-39	11	-38	10	-37	9	-36	8	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	16
17	-43	17	-42	16	-41	15	-40	14	-39	13	-38	12	-37	11	-36	10	-35	9	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	-28	2	-27	1	-26	0	-25	-1	-24	-2	-23	-3	17
18	-42	18	-41	17	-40	16	-39	15	-38	14	-37	13	-36	12	-35	11	-34	10	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	18
19	-41	19	-40	18	-39	17	-38	16	-37	15	-36	14	-35	13	-34	12	-33	11	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	-26	4	-25	3	-24	2	-23	1	-22	0	-21	-1	19
20	-40	20	-39	19	-38	18	-37	17	-36	16	-35	15	-34	14	-33	13	-32	12	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	20
21	-39	21	-38	20	-37	19	-36	18	-35	17	-34	16	-33	15	-32	14	-31	13	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	21
22	-38	22	-37	21	-36	20	-35	19	-34	18	-33	17	-32	16	-31	15	-30	14	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	-23	7	-22	6	-21	5	-20	4	-19	3	-18	2	22
23	-37	23	-36	22	-35	21	-34	20	-33	19	-32	18	-31	17	-30	16	-29	15	-28	14	-27	13	-26	12	-25	11	-24	10	-23	9	-22	8	-21	7	-20	6	-19	5	-18	4	-17	3	23
24	-36	24	-35	23	-34	22	-33	21	-32	20	-31	19	-30	18	-29	17	-28	16	-27	15	-26	14	-25	13	-24	12	-23	11	-22	10	-21	9	-20	8	-19	7	-18	6	-17	5	-16	4	24
25	-35	25	-34	24	-33	23	-32	22	-31	21	-30	20	-29	19	-28	18	-27	17	-26	16	-25	15	-24	14	-23	13	-22	12	-21	11	-20	10	-19	9	-18	8	-17	7	-16	6	-15	5	25
26	-34	26	-33	25	-32	24	-31	23	-30	22	-29	21	-28	20	-27	19	-26	18	-25	17	-24	16	-23	15	-22	14	-21	13	-20	12	-19	11	-18	10	-17	9	-16	8	-15	7	-14	6	26
27	-33	27	-32	26	-31	25	-30	24	-29	23	-28	22	-27	21	-26	20	-25	19	-24	18	-23	17	-22	16	-21	15	-20	14	-19	13	-18	12	-17	11	-16	10	-15	9	-14	8	-13	7	27
28	-32	28	-31	27	-30	26	-29	25	-28	24	-27	23	-26	22	-25	21	-24	20	-23	19	-22	18	-21	17	-20	16	-19	15	-18	14	-17	13	-16	12	-15	11	-14	10	-13	9	-12	8	28
29	-31	29	-30	28	-29	27	-28	26	-27	25	-26	24	-25	23	-24	22	-23	21	-22	20	-21	19	-20	18	-19	17	-18	16	-17	15	-16	14	-15	13	-14	12	-13	11	-12	10	-11	9	29
30	-30	30	-29	29	-28	28	-27	27	-26	26	-25	25	-24	24	-23	23	-22	22	-21	21	-20	20	-19	19	-18	18	-17	17	-16	16	-15	15	-14	14	-13	13	-12	12	-11	11	-10	10	30
31	-29	31	-28	30	-27	29	-26	28	-25	27	-24	26	-23	25	-22	24	-21	23	-20	22	-19	21	-18	20	-17	19	-16	18	-15	17	-14	16	-13	15	-12	14	-11	13	-10	12	-9	11	31
32	-28	32	-27	31	-26	30	-25	29	-24	28	-23	27	-22	26	-21	25	-20	24	-19	23	-18	22	-17	21	-16	20	-15	19	-14	18	-13	17	-12	16	-11	15	-10	14	-9	13	-8	12	32
33	-27	33	-26	32	-25	31	-24	30	-23	29	-22	28	-21	27	-20	26	-19	25	-18	24	-17	23	-16	22	-15	21	-14	20	-13	19	-12	18	-11	17	-10	16	-9	15	-8	14	-7	13	33
34	-26	34	-25	33	-24	32	-23	31	-22	30	-21	29	-20	28	-19	27	-18	26	-17	25	-16	24	-15	23	-14	22	-13	21	-12	20	-11	19	-10	18	-9	17	-8	16	-7	15	-6	14	34
35	-25	35	-24	34	-23	33	-22	32	-21	31	-20	30	-19	29	-18	28	-17	27	-16	26	-15	25	-14	24	-13	23	-12	22	-11	21	-10	20	-9	19	-8	18	-7	17	-6	16	-5	15	35
36	-24	36	-23	35	-22	34	-21	33	-20	32	-19	31	-18	30	-17	29	-16	28	-15	27	-14	26	-13	25	-12	24	-11	23	-10	22	-9	21	-8	20	-7	19	-6	18	-5	17	-4	16	36
37	-23	37	-22	36	-21	35	-20	34	-19	33	-18	32	-17	31	-16	30	-15	29	-14	28	-13	27	-12	26	-11	25	-10	24	-9	23	-8</												

Money 100 Max. value of the production cost: 30
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		25		26		27		28		29		30		
	0.70		0.73		0.77		0.80		0.83		0.87		0.90		0.93		0.97		1.00		
	30%	70%	27%	73%	23%	77%	20%	80%	17%	83%	13%	87%	10%	90%	7%	93%	3%	97%	0%	100%	
0	-39	-21	-38	-22	-37	-23	-36	-24	-35	-25	-34	-26	-33	-27	-32	-28	-31	-29	-30	-30	0
1	-38	-20	-37	-21	-36	-22	-35	-23	-34	-24	-33	-25	-32	-26	-31	-27	-30	-28	-29	-29	1
2	-37	-19	-36	-20	-35	-21	-34	-22	-33	-23	-32	-24	-31	-25	-30	-26	-29	-27	-28	-28	2
3	-36	-18	-35	-19	-34	-20	-33	-21	-32	-22	-31	-23	-30	-24	-29	-25	-28	-26	-27	-27	3
4	-35	-17	-34	-18	-33	-19	-32	-20	-31	-21	-30	-22	-29	-23	-28	-24	-27	-25	-26	-26	4
5	-34	-16	-33	-17	-32	-18	-31	-19	-30	-20	-29	-21	-28	-22	-27	-23	-26	-24	-25	-25	5
6	-33	-15	-32	-16	-31	-17	-30	-18	-29	-19	-28	-20	-27	-21	-26	-22	-25	-23	-24	-24	6
7	-32	-14	-31	-15	-30	-16	-29	-17	-28	-18	-27	-19	-26	-20	-25	-21	-24	-22	-23	-23	7
8	-31	-13	-30	-14	-29	-15	-28	-16	-27	-17	-26	-18	-25	-19	-24	-20	-23	-21	-22	-22	8
9	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-25	-17	-24	-18	-23	-19	-22	-20	-21	-21	9
10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-24	-16	-23	-17	-22	-18	-21	-19	-20	-20	10
11	-28	-10	-27	-11	-26	-12	-25	-13	-24	-14	-23	-15	-22	-16	-21	-17	-20	-18	-19	-19	11
12	-27	-9	-26	-10	-25	-11	-24	-12	-23	-13	-22	-14	-21	-15	-20	-16	-19	-17	-18	-18	12
13	-26	-8	-25	-9	-24	-10	-23	-11	-22	-12	-21	-13	-20	-14	-19	-15	-18	-16	-17	-17	13
14	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-20	-12	-19	-13	-18	-14	-17	-15	-16	-16	14
15	-24	-6	-23	-7	-22	-8	-21	-9	-20	-10	-19	-11	-18	-12	-17	-13	-16	-14	-15	-15	15
16	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-18	-10	-17	-11	-16	-12	-15	-13	-14	-14	16
17	-22	-4	-21	-5	-20	-6	-19	-7	-18	-8	-17	-9	-16	-10	-15	-11	-14	-12	-13	-13	17
18	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-16	-8	-15	-9	-14	-10	-13	-11	-12	-12	18
19	-20	-2	-19	-3	-18	-4	-17	-5	-16	-6	-15	-7	-14	-8	-13	-9	-12	-10	-11	-11	19
20	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-14	-6	-13	-7	-12	-8	-11	-9	-10	-10	20
21	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-13	-5	-12	-6	-11	-7	-10	-8	-9	-9	21
22	-17	1	-16	0	-15	-1	-14	-2	-13	-3	-12	-4	-11	-5	-10	-6	-9	-7	-8	-8	22
23	-16	2	-15	1	-14	0	-13	-1	-12	-2	-11	-3	-10	-4	-9	-5	-8	-6	-7	-7	23
24	-15	3	-14	2	-13	1	-12	0	-11	-1	-10	-2	-9	-3	-8	-4	-7	-5	-6	-6	24
25	-14	4	-13	3	-12	2	-11	1	-10	0	-9	-1	-8	-2	-7	-3	-6	-4	-5	-5	25
26	-13	5	-12	4	-11	3	-10	2	-9	1	-8	0	-7	-1	-6	-2	-5	-3	-4	-4	26
27	-12	6	-11	5	-10	4	-9	3	-8	2	-7	1	-6	0	-5	-1	-4	-2	-3	-3	27
28	-11	7	-10	6	-9	5	-8	4	-7	3	-6	2	-5	1	-4	0	-3	-1	-2	-2	28
29	-10	8	-9	7	-8	6	-7	5	-6	4	-5	3	-4	2	-3	1	-2	0	-1	-1	29
30	-9	9	-8	8	-7	7	-6	6	-5	5	-4	4	-3	3	-2	2	-1	1	0	0	30
31	-8	10	-7	9	-6	8	-5	7	-4	6	-3	5	-2	4	-1	3	0	2	1	1	31
32	-7	11	-6	10	-5	9	-4	8	-3	7	-2	6	-1	5	0	4	1	3	2	2	32
33	-6	12	-5	11	-4	10	-3	9	-2	8	-1	7	0	6	1	5	2	4	3	3	33
34	-5	13	-4	12	-3	11	-2	10	-1	9	0	8	1	7	2	6	3	5	4	4	34
35	-4	14	-3	13	-2	12	-1	11	0	10	1	9	2	8	3	7	4	6	5	5	35
36	-3	15	-2	14	-1	13	0	12	1	11	2	10	3	9	4	8	5	7	6	6	36
37	-2	16	-1	15	0	14	1	13	2	12	3	11	4	10	5	9	6	8	7	7	37
38	-1	17	0	16	1	15	2	14	3	13	4	12	5	11	6	10	7	9	8	8	38
39	0	18	1	17	2	16	3	15	4	14	5	13	6	12	7	11	8	10	9	9	39
40	1	19	2	18	3	17	4	16	5	15	6	14	7	13	8	12	9	11	10	10	40
41	2	20	3	19	4	18	5	17	6	16	7	15	8	14	9	13	10	12	11	11	41
42	3	21	4	20	5	19	6	18	7	17	8	16	9	15	10	14	11	13	12	12	42
43	4	22	5	21	6	20	7	19	8	18	9	17	10	16	11	15	12	14	13	13	43
44	5	23	6	22	7	21	8	20	9	19	10	18	11	17	12	16	13	15	14	14	44
45	6	24	7	23	8	22	9	21	10	20	11	19	12	18	13	17	14	16	15	15	45
46	7	25	8	24	9	23	10	22	11	21	12	20	13	19	14	18	15	17	16	16	46
47	8	26	9	25	10	24	11	23	12	22	13	21	14	20	15	19	16	18	17	17	47
48	9	27	10	26	11	25	12	24	13	23	14	22	15	21	16	20	17	19	18	18	48
49	10	28	11	27	12	26	13	25	14	24	15	23	16	22	17	21	18	20	19	19	49
50	11	29	12	28	13	27	14	26	15	25	16	24	17	23	18	22	19	21	20	20	50
51	12	30	13	29	14	28	15	27	16	26	17	25	18	24	19	23	20	22	21	21	51
52	13	31	14	30	15	29	16	28	17	27	18	26	19	25	20	24	21	23	22	22	52
53	14	32	15	31	16	30	17	29	18	28	19	27	20	26	21	25	22	24	23	23	53
54	15	33	16	32	17	31	18	30	19	29	20	28	21	27	22	26	23	25	24	24	54
55	16	34	17	33	18	32	19	31	20	30	21	29	22	28	23	27	24	26	25	25	55
56	17	35	18	34	19	33	20	32	21	31	22	30	23	29	24	28	25	27	26	26	56
57	18	36	19	35	20	34	21	33	22	32	23	31	24	30	25	29	26	28	27	27	57
58	19	37	20	36	21	35	22	34	23	33	24	32	25	31	26	30	27	29	28	28	58

Selling price

Selling price

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Money 0 Max. value of the production cost: 36

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.03		0.06		0.08		0.11		0.14		0.17		0.19		0.22		0.25		0.28		0.31		0.33		0.36		0.39		0.42		0.44		0.47		0.50		0.53		0.56		
	100%	0%	97%	3%	94%	6%	92%	8%	89%	11%	86%	14%	83%	17%	81%	19%	78%	22%	75%	25%	72%	28%	69%	31%	67%	33%	64%	36%	61%	39%	58%	42%	56%	44%	53%	47%	50%	50%	47%	53%	44%	56%	
0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
3	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
4	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
5	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
6	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
7	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
8	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
9	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
10	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
11	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
12	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
13	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
14	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	14
15	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	15
16	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	16
17	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	17
18	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	18
19	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	19
20	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	20
21	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	21
22	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	22
23	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	23
24	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	24
25	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	25
26	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	26
27	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	27
28	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	28
29	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	29
30	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	30
31	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	31
32	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	32
33	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	33
34	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	34
35	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	35
36	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	36
37	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	37
38	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	38
39	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	39
40	0	40	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	40
41	0	41	0	40	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0												

Money 0 Max. value of the production cost: 36
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		
	0.58		0.61		0.64		0.67		0.69		0.72		0.75		0.78		0.81		0.83		0.86		0.89		0.92		0.94		0.97		1.00		
	42%	58%	39%	61%	36%	64%	33%	67%	31%	69%	28%	72%	25%	75%	22%	78%	19%	81%	17%	83%	14%	86%	11%	89%	8%	92%	6%	94%	3%	97%	0%	100%	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
21	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	
22	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	
23	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	
24	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	
25	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	
26	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	
27	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	
28	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	
29	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	29	
30	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	30	
31	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	31	
32	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	32	
33	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	33	
34	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	34
35	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	35
36	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	36
37	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	1	1	37
38	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	1	3	2	2	38
39	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	1	5	2	4	3	3	39
40	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	1	7	2	6	3	5	4	4	40
41	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	1	9	2	8	3	7	4	6	5	5	41
42	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	1	11	2	10	3	9	4	8	5	7	6	6	42
43	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	1	13	2	12	3	11	4	10	5	9	6	8	7	7	43
44	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	1	15	2	14	3	13	4	12	5	11	6	10	7	9	8	8	44
45	0	24	0	23	0	22	0	21	0	20	0	19	0	18	1	17	2	16	3	15	4	14	5	13	6	12	7	11	8	10	9	9	45
46	0	25	0	24	0	23	0	22	0	21	0	20	1	19	2	18	3	17	4	16	5	15	6	14	7	13	8	12	9	11	10	10	46
47	0	26	0	25	0	24	0	23	0	22	1	21	2	20	3	19	4	18	5	17	6	16	7	15	8	14	9	13	10	12	11	11	47
48	0	27	0	26	0	25	0	24	1	23	2	22	3	21	4	20	5	19	6	18	7	17	8	16	9	15	10	14	11	13	12	12	48
49	0	28	0	27	0	26	1	25	2	24	3	23	4	22	5	21	6	20	7	19	8	18	9	17	10	16	11	15	12	14	13	13	49
50	0	29	0	28	1	27	2	26	3	25	4	24	5	23	6	22	7	21	8	20	9	19	10	18	11	17	12	16	13	15	14	14	50
51	0	30	1	29	2	28	3	27	4	26	5	25	6	24	7	23	8	22	9	21	10	20	11	19	12	18	13	17	14	16	15	15	51
52	1	31	2	30	3	29	4	28	5	27	6	26	7	25	8	24	9	23	10	22	11	21	12	20	13	19	14	18	15	17	16	16	52
53	2	32	3	31	4	30	5	29	6	28	7	27	8	26	9	25	10	24	11	23	12	22	13	21	14	20	15	19	16	18	17	17	53
54	3	33	4	32	5	31	6	30	7	29	8	28	9	27	10	26	11	25	12	24	13	23	14	22	15	21	16	20	17	19	18	18	54
55	4	34	5	33	6	32	7	31	8	30	9	29	10	28	11	27	12	26	13	25	14	24	15	23	16	22	17	21	18	20	19	19	55
56	5	35	6	34	7	33	8	32	9	31	10	30	11	29	12	28	13	27	14	26	15	25	16	24	17	23	18	22	19	21	20	20	56
57	6	36	7	35	8	34	9	33	10	32	11	31	12	30	13	29	14	28	15	27													

Money 50

Max. value of the production cost: 36

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.03		0.06		0.08		0.11		0.14		0.17		0.19		0.22		0.25		0.28		0.31		0.33		0.36		0.39		0.42		0.44		0.47		0.50		0.53		0.56		
	100%	0%	97%	3%	94%	6%	92%	8%	89%	11%	86%	14%	83%	17%	81%	19%	78%	22%	75%	25%	72%	28%	69%	31%	67%	33%	64%	36%	61%	39%	58%	42%	56%	44%	53%	47%	50%	50%	47%	53%	44%	56%	
0	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	-50	-19	-50	-20	0
1	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	-50	-19	1
2	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	2
3	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-49	-17	3
4	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-49	-15	-48	-16	4
5	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-49	-13	-48	-14	-47	-15	5
6	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-49	-11	-48	-12	-47	-13	-46	-14	6
7	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-49	-9	-48	-10	-47	-11	-46	-12	-45	-13	7
8	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-49	-7	-48	-8	-47	-9	-46	-10	-45	-11	-44	-12	8
9	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-49	-5	-48	-6	-47	-7	-46	-8	-45	-9	-44	-10	-43	-11	9
10	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-49	-3	-48	-4	-47	-5	-46	-6	-45	-7	-44	-8	-43	-9	-42	-10	10
11	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-49	-1	-48	-2	-47	-3	-46	-4	-45	-5	-44	-6	-43	-7	-42	-8	-41	-9	11
12	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-49	1	-48	0	-47	-1	-46	-2	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	12
13	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-49	3	-48	2	-47	1	-46	0	-45	-1	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	13
14	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-49	5	-48	4	-47	3	-46	2	-45	1	-44	0	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	14
15	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-49	7	-48	6	-47	5	-46	4	-45	3	-44	2	-43	1	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	15
16	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-49	9	-48	8	-47	7	-46	6	-45	5	-44	4	-43	3	-42	2	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	16
17	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-49	11	-48	10	-47	9	-46	8	-45	7	-44	6	-43	5	-42	4	-41	3	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	17
18	-50	18	-50	17	-50	16	-50	15	-50	14	-49	13	-48	12	-47	11	-46	10	-45	9	-44	8	-43	7	-42	6	-41	5	-40	4	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	18
19	-50	19	-50	18	-50	17	-50	16	-49	15	-48	14	-47	13	-46	12	-45	11	-44	10	-43	9	-42	8	-41	7	-40	6	-39	5	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	19
20	-50	20	-50	19	-50	18	-49	17	-48	16	-47	15	-46	14	-45	13	-44	12	-43	11	-42	10	-41	9	-40	8	-39	7	-38	6	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	20
21	-50	21	-50	20	-49	19	-48	18	-47	17	-46	16	-45	15	-44	14	-43	13	-42	12	-41	11	-40	10	-39	9	-38	8	-37	7	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	21
22	-50	22	-49	21	-48	20	-47	19	-46	18	-45	17	-44	16	-43	15	-42	14	-41	13	-40	12	-39	11	-38	10	-37	9	-36	8	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	22
23	-49	23	-48	22	-47	21	-46	20	-45	19	-44	18	-43	17	-42	16	-41	15	-40	14	-39	13	-38	12	-37	11	-36	10	-35	9	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	23
24	-48	24	-47	23	-46	22	-45	21	-44	20	-43	19	-42	18	-41	17	-40	16	-39	15	-38	14	-37	13	-36	12	-35	11	-34	10	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	24
25	-47	25	-46	24	-45	23	-44	22	-43	21	-42	20	-41	19	-40	18	-39	17	-38	16	-37	15	-36	14	-35	13	-34	12	-33	11	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	25
26	-46	26	-45	25	-44	24	-43	23	-42	22	-41	21	-40	20	-39	19	-38	18	-37	17	-36	16	-35	15	-34	14	-33	13	-32	12	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	26
27	-45	27	-44	26	-43	25	-42	24	-41	23	-40	22	-39	21	-38	20	-37	19	-36	18	-35	17	-34	16	-33	15	-32	14	-31	13	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	27
28	-44	28	-43	27	-42	26	-41	25	-40	24	-39	23	-38	22	-37	21	-36	20	-35	19	-34	18	-33	17	-32	16	-31	15	-30	14	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	28
29	-43	29	-42	28	-41	27	-40	26	-39	25	-38	24	-37	23	-36	22	-35	21	-34	20	-33	19	-32	18	-31	17	-30	16	-29	15	-28	14	-27	13	-26	12	-25	11	-24	10	-23	9	29
30	-42	30	-41	29	-40	28	-39	27	-38	26	-37	25	-36	24	-35	23	-34	22	-33	21	-32	20	-31	19	-30	18	-29	17	-28	16	-27	15	-26	14	-25	13	-24	12	-23	11	-22	10	30
31	-41	31	-40	30	-39	29	-38	28	-37	27	-36	26	-35	25	-34	24	-33	23	-32	22	-31	21	-30	20	-29	19	-28	18	-27	17	-26	16	-25	15	-24	14	-23	13	-22	12	-21	11	31
32	-40	32	-39	31	-38	30	-37	29	-36	28	-35	27	-34	26	-33	25	-32	24	-31	23	-30	22	-29	21	-28	20	-27	19	-26	18	-25	17	-24	16	-23	15	-22	14	-21	13	-20	12	32
33	-39	33	-38	32	-37	31	-36	30	-35	29	-34	28	-33	27	-32	26	-31	25	-30	24	-29	23	-28	22	-27	21	-26	20	-25	19	-24	18	-23	17	-22	16	-21	15	-20	14	-19	13	33
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35	-37	35	-36	34	-35	33	-34	32	-33	31	-32	30	-31	29	-30	28	-29	27	-28	26	-27	25	-26	24	-25	23	-24	22	-23	21	-22	20	-21	19	-20	18	-19	17	-18	16	-17	15	35
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37	-35	37	-34	36	-33	35	-32	34	-31	33	-30	32	-29	31	-28	30	-27	29	-26	28	-25	2																					

Money 50 Max. value of the production cost: 36
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36			
	0.58	0.61	0.64	0.67	0.69	0.72	0.75	0.78	0.81	0.83	0.86	0.89	0.92	0.94	0.97	1.00																		
	42%	58%	39%	61%	36%	64%	33%	67%	31%	69%	28%	72%	25%	75%	22%	78%	19%	81%	17%	83%	14%	86%	11%	89%	8%	92%	6%	94%	3%	97%	0%	100%		
0	-50	-21	-50	-22	-49	-23	-48	-24	-47	-25	-46	-26	-45	-27	-44	-28	-43	-29	-42	-41	-29	-40	-30	-39	-31	-38	-32	-37	-33	-36	-34	-35	-36	0
1	-50	-20	-49	-21	-48	-22	-47	-23	-46	-24	-45	-25	-44	-26	-43	-27	-42	-28	-41	-29	-40	-30	-39	-31	-38	-32	-37	-33	-36	-34	-35	-35	-35	1
2	-49	-19	-48	-20	-47	-21	-46	-22	-45	-23	-44	-24	-43	-25	-42	-26	-41	-27	-40	-28	-39	-29	-38	-30	-37	-31	-36	-32	-35	-33	-34	-34	-34	2
3	-48	-18	-47	-19	-46	-20	-45	-21	-44	-22	-43	-23	-42	-24	-41	-25	-40	-26	-39	-27	-38	-28	-37	-29	-36	-30	-35	-31	-34	-32	-33	-33	-33	3
4	-47	-17	-46	-18	-45	-19	-44	-20	-43	-21	-42	-22	-41	-23	-40	-24	-39	-25	-38	-26	-37	-27	-36	-28	-35	-29	-34	-30	-33	-31	-32	-32	-32	4
5	-46	-16	-45	-17	-44	-18	-43	-19	-42	-20	-41	-21	-40	-22	-39	-23	-38	-24	-37	-25	-36	-26	-35	-27	-34	-28	-33	-29	-32	-30	-31	-31	-31	5
6	-45	-15	-44	-16	-43	-17	-42	-18	-41	-19	-40	-20	-39	-21	-38	-22	-37	-23	-36	-24	-35	-25	-34	-26	-33	-27	-32	-28	-31	-29	-30	-30	-30	6
7	-44	-14	-43	-15	-42	-16	-41	-17	-40	-18	-39	-19	-38	-20	-37	-21	-36	-22	-35	-23	-34	-24	-33	-25	-32	-26	-31	-27	-30	-28	-29	-29	-29	7
8	-43	-13	-42	-14	-41	-15	-40	-16	-39	-17	-38	-18	-37	-19	-36	-20	-35	-21	-34	-22	-33	-23	-32	-24	-31	-25	-30	-26	-29	-27	-28	-28	-28	8
9	-42	-12	-41	-13	-40	-14	-39	-15	-38	-16	-37	-17	-36	-18	-35	-19	-34	-20	-33	-21	-32	-22	-31	-23	-30	-24	-29	-25	-28	-26	-27	-27	-27	9
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11	-40	-10	-39	-11	-38	-12	-37	-13	-36	-14	-35	-15	-34	-16	-33	-17	-32	-18	-31	-19	-30	-20	-29	-21	-28	-22	-27	-23	-26	-24	-25	-25	-25	11
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15	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-25	-17	-24	-18	-23	-19	-22	-20	-21	-21	-21	15
16	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-24	-16	-23	-17	-22	-18	-21	-19	-20	-20	-20	16
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20	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-20	-12	-19	-13	-18	-14	-17	-15	-16	-16	-16	20
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22	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-18	-10	-17	-11	-16	-12	-15	-13	-14	-14	-14	22
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24	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-16	-8	-15	-9	-14	-10	-13	-11	-12	-12	-12	24
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26	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-14	-6	-13	-7	-12	-8	-11	-9	-10	-10	-10	26
27	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-13	-5	-12	-6	-11	-7	-10	-8	-9	-9	-9	27
28	-23	7	-22	6	-21	5	-20	4	-19	3	-18	2	-17	1	-16	0	-15	-1	-14	-2	-13	-3	-12	-4	-11	-5	-10	-6	-9	-7	-8	-8	-8	28
29	-22	8	-21	7	-20	6	-19	5	-18	4	-17	3	-16	2	-15	1	-14	0	-13	-1	-12	-2	-11	-3	-10	-4	-9	-5	-8	-6	-7	-7	-7	29
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31	-20	10	-19	9	-18	8	-17	7	-16	6	-15	5	-14	4	-13	3	-12	2	-11	1	-10	0	-9	-1	-8	-2	-7	-3	-6	-4	-5	-5	-5	31
32	-19	11	-18	10	-17	9	-16	8	-15	7	-14	6	-13	5	-12	4	-11	3	-10	2	-9	1	-8	0	-7	-1	-6	-2	-5	-3	-4	-4	-4	32
33	-18	12	-17	11	-16	10	-15	9	-14	8	-13	7	-12	6	-11	5	-10	4	-9	3	-8	2	-7	1	-6	0	-5	-1	-4	-2	-3	-3	-3	33
34	-17	13	-16	12	-15	11	-14	10	-13	9	-12	8	-11	7	-10	6	-9	5	-8	4	-7	3	-6	2	-5	1	-4	0	-3	-1	-2	-2	-2	34
35	-16	14	-15	13	-14	12	-13	11	-12	10	-11	9	-10	8	-9	7	-8	6	-7	5	-6	4	-5	3	-4	2	-3	1	-2	0	-1	-1	-1	35
36	-15	15	-14	14	-13	13	-12	12	-11	11	-10	10	-9	9	-8	8	-7	7	-6	6	-5	5	-4	4	-3	3	-2	2	-1	1	0	0	0	36
37	-14	16	-13	15	-12	14	-11	13	-10	12	-9	11	-8	10	-7	9	-6	8	-5	7	-4	6	-3	5	-2	4	-1	3	0	2	1	1	1	37
38	-13	17	-12	16	-11	15	-10	14	-9	13	-8	12	-7	11	-6	10	-5	9	-4	8	-3	7	-2	6	-1	5	0	4	1	3	2	2	2	38
39	-12	18	-11	17	-10	16	-9	15	-8	14	-7	13	-6	12	-5	11	-4	10	-3	9	-2	8	-1	7	0	6	1	5	2	4	3	3	3	39
40	-11	19	-10	18	-9	17	-8	16	-7	15	-6	14	-5	13	-4	12	-3	11	-2	10	-1	9	0	8	1	7	2	6	3	5	4	4	4	40
41	-10	20	-9	19	-8	18	-7	17	-6	16	-5	15	-4	14	-3	13	-2	12	-1	11	0	10	1	9	2	8	3	7	4	6	5	5	5	41
42	-9	21	-8	20	-7	19	-6	18	-5	17	-4	16	-3	15	-2	14	-1	13	0	12	1	11	2	10	3	9	4	8	5	7	6	6	6	42
43	-8	22	-7	21	-6	20	-5	19	-4	18	-3	17	-2	16	-1	15	0	14	1	13	2	12	3	11	4	10	5	9	6	8	7	7	7	43
44	-7	23	-6	22	-5	21	-4	20	-3	19	-2	18	-1	17	0	16	1	15	2	14	3	13	4	12	5	11	6	10	7	9	8	8	8	44
45	-6	24	-5	23	-4	22	-3	21	-2	20	-1	19	0	18	1	17	2	16	3	15	4	14	5	13	6	12	7	11	8	10	9	9	9	45
46	-5	25	-4	24	-3	23	-2	22	-1	21	0	20	1	19	2	18	3	17	4	16	5	15	6	14	7	13	8	12	9	11	10	10	10	46
47	-4	26	-3	25	-2	24	-1	23	0	22	1	21	2	20	3	19	4	18	5	17	6	16	7	15	8	14	9	13	10	12	11	11	11	47
48	-3	27	-2	26	-1	25	0	24																										

Money 100 Max. value of the production cost: 36

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.03		0.06		0.08		0.11		0.14		0.17		0.19		0.22		0.25		0.28		0.31		0.33		0.36		0.39		0.42		0.44		0.47		0.50		0.53		0.56		
	100%	0%	97%	3%	94%	6%	92%	8%	89%	11%	86%	14%	83%	17%	81%	19%	78%	22%	75%	25%	72%	28%	69%	31%	67%	33%	64%	36%	61%	39%	58%	42%	56%	44%	53%	47%	50%	50%	47%	53%	44%	56%	
0	-72	0	-71	-1	-70	-2	-69	-3	-68	-4	-67	-5	-66	-6	-65	-7	-64	-8	-63	-9	-62	-10	-61	-11	-60	-12	-59	-13	-58	-14	-57	-15	-56	-16	-55	-17	-54	-18	-53	-19	-52	-20	0
1	-71	1	-70	0	-69	-1	-68	-2	-67	-3	-66	-4	-65	-5	-64	-6	-63	-7	-62	-8	-61	-9	-60	-10	-59	-11	-58	-12	-57	-13	-56	-14	-55	-15	-54	-16	-53	-17	-52	-18	-51	-19	1
2	-70	2	-69	1	-68	0	-67	-1	-66	-2	-65	-3	-64	-4	-63	-5	-62	-6	-61	-7	-60	-8	-59	-9	-58	-10	-57	-11	-56	-12	-55	-13	-54	-14	-53	-15	-52	-16	-51	-17	-50	-18	2
3	-69	3	-68	2	-67	1	-66	0	-65	-1	-64	-2	-63	-3	-62	-4	-61	-5	-60	-6	-59	-7	-58	-8	-57	-9	-56	-10	-55	-11	-54	-12	-53	-13	-52	-14	-51	-15	-50	-16	-49	-17	3
4	-68	4	-67	3	-66	2	-65	1	-64	0	-63	-1	-62	-2	-61	-3	-60	-4	-59	-5	-58	-6	-57	-7	-56	-8	-55	-9	-54	-10	-53	-11	-52	-12	-51	-13	-50	-14	-49	-15	-48	-16	4
5	-67	5	-66	4	-65	3	-64	2	-63	1	-62	0	-61	-1	-60	-2	-59	-3	-58	-4	-57	-5	-56	-6	-55	-7	-54	-8	-53	-9	-52	-10	-51	-11	-50	-12	-49	-13	-48	-14	-47	-15	5
6	-66	6	-65	5	-64	4	-63	3	-62	2	-61	1	-60	0	-59	-1	-58	-2	-57	-3	-56	-4	-55	-5	-54	-6	-53	-7	-52	-8	-51	-9	-50	-10	-49	-11	-48	-12	-47	-13	-46	-14	6
7	-65	7	-64	6	-63	5	-62	4	-61	3	-60	2	-59	1	-58	0	-57	-1	-56	-2	-55	-3	-54	-4	-53	-5	-52	-6	-51	-7	-50	-8	-49	-9	-48	-10	-47	-11	-46	-12	-45	-13	7
8	-64	8	-63	7	-62	6	-61	5	-60	4	-59	3	-58	2	-57	1	-56	0	-55	-1	-54	-2	-53	-3	-52	-4	-51	-5	-50	-6	-49	-7	-48	-8	-47	-9	-46	-10	-45	-11	-44	-12	8
9	-63	9	-62	8	-61	7	-60	6	-59	5	-58	4	-57	3	-56	2	-55	1	-54	0	-53	-1	-52	-2	-51	-3	-50	-4	-49	-5	-48	-6	-47	-7	-46	-8	-45	-9	-44	-10	-43	-11	9
10	-62	10	-61	9	-60	8	-59	7	-58	6	-57	5	-56	4	-55	3	-54	2	-53	1	-52	0	-51	-1	-50	-2	-49	-3	-48	-4	-47	-5	-46	-6	-45	-7	-44	-8	-43	-9	-42	-10	10
11	-61	11	-60	10	-59	9	-58	8	-57	7	-56	6	-55	5	-54	4	-53	3	-52	2	-51	1	-50	0	-49	-1	-48	-2	-47	-3	-46	-4	-45	-5	-44	-6	-43	-7	-42	-8	-41	-9	11
12	-60	12	-59	11	-58	10	-57	9	-56	8	-55	7	-54	6	-53	5	-52	4	-51	3	-50	2	-49	1	-48	0	-47	-1	-46	-2	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	12
13	-59	13	-58	12	-57	11	-56	10	-55	9	-54	8	-53	7	-52	6	-51	5	-50	4	-49	3	-48	2	-47	1	-46	0	-45	-1	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	13
14	-58	14	-57	13	-56	12	-55	11	-54	10	-53	9	-52	8	-51	7	-50	6	-49	5	-48	4	-47	3	-46	2	-45	1	-44	0	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	14
15	-57	15	-56	14	-55	13	-54	12	-53	11	-52	10	-51	9	-50	8	-49	7	-48	6	-47	5	-46	4	-45	3	-44	2	-43	1	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	15
16	-56	16	-55	15	-54	14	-53	13	-52	12	-51	11	-50	10	-49	9	-48	8	-47	7	-46	6	-45	5	-44	4	-43	3	-42	2	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	16
17	-55	17	-54	16	-53	15	-52	14	-51	13	-50	12	-49	11	-48	10	-47	9	-46	8	-45	7	-44	6	-43	5	-42	4	-41	3	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	17
18	-54	18	-53	17	-52	16	-51	15	-50	14	-49	13	-48	12	-47	11	-46	10	-45	9	-44	8	-43	7	-42	6	-41	5	-40	4	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	18
19	-53	19	-52	18	-51	17	-50	16	-49	15	-48	14	-47	13	-46	12	-45	11	-44	10	-43	9	-42	8	-41	7	-40	6	-39	5	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	19
20	-52	20	-51	19	-50	18	-49	17	-48	16	-47	15	-46	14	-45	13	-44	12	-43	11	-42	10	-41	9	-40	8	-39	7	-38	6	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	20
21	-51	21	-50	20	-49	19	-48	18	-47	17	-46	16	-45	15	-44	14	-43	13	-42	12	-41	11	-40	10	-39	9	-38	8	-37	7	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	21
22	-50	22	-49	21	-48	20	-47	19	-46	18	-45	17	-44	16	-43	15	-42	14	-41	13	-40	12	-39	11	-38	10	-37	9	-36	8	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	22
23	-49	23	-48	22	-47	21	-46	20	-45	19	-44	18	-43	17	-42	16	-41	15	-40	14	-39	13	-38	12	-37	11	-36	10	-35	9	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	23
24	-48	24	-47	23	-46	22	-45	21	-44	20	-43	19	-42	18	-41	17	-40	16	-39	15	-38	14	-37	13	-36	12	-35	11	-34	10	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	24
25	-47	25	-46	24	-45	23	-44	22	-43	21	-42	20	-41	19	-40	18	-39	17	-38	16	-37	15	-36	14	-35	13	-34	12	-33	11	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	25
26	-46	26	-45	25	-44	24	-43	23	-42	22	-41	21	-40	20	-39	19	-38	18	-37	17	-36	16	-35	15	-34	14	-33	13	-32	12	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	26
27	-45	27	-44	26	-43	25	-42	24	-41	23	-40	22	-39	21	-38	20	-37	19	-36	18	-35	17	-34	16	-33	15	-32	14	-31	13	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	27
28	-44	28	-43	27	-42	26	-41	25	-40	24	-39	23	-38	22	-37	21	-36	20	-35	19	-34	18	-33	17	-32	16	-31	15	-30	14	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	28
29	-43	29	-42	28	-41	27	-40	26	-39	25	-38	24	-37	23	-36	22	-35	21	-34	20	-33	19	-32	18	-31	17	-30	16	-29	15	-28	14	-27	13	-26	12	-25	11	-24	10	-23	9	29
30	-42	30	-41	29	-40	28	-39	27	-38	26	-37	25	-36	24	-35	23	-34	22	-33	21	-32	20	-31	19	-30	18	-29	17	-28	16	-27	15	-26	14	-25	13	-24	12	-23	11	-22	10	30
31	-41	31	-40	30	-39	29	-38	28	-37	27	-36	26	-35	25	-34	24	-33	23	-32	22	-31	20	-30	19	-29	18	-28	17	-27	16	-26	15	-25	14	-24	13	-23	12	-22	11	-21	10	31
32	-40	32	-39	31	-38	30	-37	29	-36	28	-35	27	-34	26	-33	25	-32	24	-31	23	-30	22	-29	21	-28	20	-27	19	-26	18	-25	17	-24	16	-23	15	-22	14	-21	13	-20	12	32
33	-39	33	-38	32	-37	31	-36	30	-35	29	-34	28	-33	27	-32	26	-31	25	-30	24	-29	23	-28	22	-27	21	-26	20	-25	19	-24	18	-23	17	-22	16	-21	15	-20	14	-19	13	33
34	-38	34	-37	33	-36	32	-35	31	-34	30	-33	29	-32	28	-31	27	-30	26	-29	25	-28	24	-27	23	-26	22	-25	21	-24	20	-23	19	-22	18	-21	17	-20	16	-19	15	-18	14	34
35	-37	35	-36	34	-35	33	-34	32	-33	31	-32	30	-31	29	-30	28	-29	27	-28	26	-27	25	-26	24	-25	23	-24	22	-23	21	-22	20	-21	19	-20	18	-19	17	-18	16	-17	15	35
36	-36	36	-35	35	-34	34	-33	33	-32	32	-31	31	-30	30	-29	29	-28	28	-27	27	-26	26	-25	25	-24	24	-23	23	-22	22	-21	21	-20	20	-19	19	-18	18	-17	17	-16	16	36
37	-35	37	-34	36	-33	35	-32	34	-31	33	-30	32	-29	31	-28	30	-27	29	-26	28	-25	27	-24	26	-23	25	-22	24															

Money 100 Max. value of the production cost: 36
 1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36			
	0.58	0.61	0.64	0.67	0.69	0.72	0.75	0.78	0.81	0.83	0.86	0.89	0.92	0.94	0.97	1.00																		
	42%	58%	39%	61%	36%	64%	33%	67%	31%	69%	28%	72%	25%	75%	22%	78%	19%	81%	17%	83%	14%	86%	11%	89%	8%	92%	6%	94%	3%	97%	0%	100%		
0	-51	-21	-50	-22	-49	-23	-48	-24	-47	-25	-46	-26	-45	-27	-44	-28	-43	-29	-42	-41	-29	-40	-30	-39	-31	-38	-32	-37	-33	-36	-34	-35	-36	0
1	-50	-20	-49	-21	-48	-22	-47	-23	-46	-24	-45	-25	-44	-26	-43	-27	-42	-28	-41	-29	-40	-30	-39	-31	-38	-32	-37	-33	-36	-34	-35	-35	1	
2	-49	-19	-48	-20	-47	-21	-46	-22	-45	-23	-44	-24	-43	-25	-42	-26	-41	-27	-40	-28	-39	-29	-38	-30	-37	-31	-36	-32	-35	-33	-34	-34	2	
3	-48	-18	-47	-19	-46	-20	-45	-21	-44	-22	-43	-23	-42	-24	-41	-25	-40	-26	-39	-27	-38	-28	-37	-29	-36	-30	-35	-31	-34	-32	-33	-33	3	
4	-47	-17	-46	-18	-45	-19	-44	-20	-43	-21	-42	-22	-41	-23	-40	-24	-39	-25	-38	-26	-37	-27	-36	-28	-35	-29	-34	-30	-33	-31	-32	-32	4	
5	-46	-16	-45	-17	-44	-18	-43	-19	-42	-20	-41	-21	-40	-22	-39	-23	-38	-24	-37	-25	-36	-26	-35	-27	-34	-28	-33	-29	-32	-30	-31	-31	5	
6	-45	-15	-44	-16	-43	-17	-42	-18	-41	-19	-40	-20	-39	-21	-38	-22	-37	-23	-36	-24	-35	-25	-34	-26	-33	-27	-32	-28	-31	-29	-30	-30	6	
7	-44	-14	-43	-15	-42	-16	-41	-17	-40	-18	-39	-19	-38	-20	-37	-21	-36	-22	-35	-23	-34	-24	-33	-25	-32	-26	-31	-27	-30	-28	-29	-29	7	
8	-43	-13	-42	-14	-41	-15	-40	-16	-39	-17	-38	-18	-37	-19	-36	-20	-35	-21	-34	-22	-33	-23	-32	-24	-31	-25	-30	-26	-29	-27	-28	-28	8	
9	-42	-12	-41	-13	-40	-14	-39	-15	-38	-16	-37	-17	-36	-18	-35	-19	-34	-20	-33	-21	-32	-22	-31	-23	-30	-24	-29	-25	-28	-26	-27	-27	9	
10	-41	-11	-40	-12	-39	-13	-38	-14	-37	-15	-36	-16	-35	-17	-34	-18	-33	-19	-32	-20	-31	-21	-30	-22	-29	-23	-28	-24	-27	-25	-26	-26	10	
11	-40	-10	-39	-11	-38	-12	-37	-13	-36	-14	-35	-15	-34	-16	-33	-17	-32	-18	-31	-19	-30	-20	-29	-21	-28	-22	-27	-23	-26	-24	-25	-25	11	
12	-39	-9	-38	-10	-37	-11	-36	-12	-35	-13	-34	-14	-33	-15	-32	-16	-31	-17	-30	-18	-29	-19	-28	-20	-27	-21	-26	-22	-25	-23	-24	-24	12	
13	-38	-8	-37	-9	-36	-10	-35	-11	-34	-12	-33	-13	-32	-14	-31	-15	-30	-16	-29	-17	-28	-18	-27	-19	-26	-20	-25	-21	-24	-22	-23	-23	13	
14	-37	-7	-36	-8	-35	-9	-34	-10	-33	-11	-32	-12	-31	-13	-30	-14	-29	-15	-28	-16	-27	-17	-26	-18	-25	-19	-24	-20	-23	-21	-22	-22	14	
15	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-25	-17	-24	-18	-23	-19	-22	-20	-21	-21	15	
16	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-24	-16	-23	-17	-22	-18	-21	-19	-20	-20	16	
17	-34	-4	-33	-5	-32	-6	-31	-7	-30	-8	-29	-9	-28	-10	-27	-11	-26	-12	-25	-13	-24	-14	-23	-15	-22	-16	-21	-17	-20	-18	-19	-19	17	
18	-33	-3	-32	-4	-31	-5	-30	-6	-29	-7	-28	-8	-27	-9	-26	-10	-25	-11	-24	-12	-23	-13	-22	-14	-21	-15	-20	-16	-19	-17	-18	-18	18	
19	-32	-2	-31	-3	-30	-4	-29	-5	-28	-6	-27	-7	-26	-8	-25	-9	-24	-10	-23	-11	-22	-12	-21	-13	-20	-14	-19	-15	-18	-16	-17	-17	19	
20	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-20	-12	-19	-13	-18	-14	-17	-15	-16	-16	20	
21	-30	0	-29	-1	-28	-2	-27	-3	-26	-4	-25	-5	-24	-6	-23	-7	-22	-8	-21	-9	-20	-10	-19	-11	-18	-12	-17	-13	-16	-14	-15	-15	21	
22	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-18	-10	-17	-11	-16	-12	-15	-13	-14	-14	22	
23	-28	2	-27	1	-26	0	-25	-1	-24	-2	-23	-3	-22	-4	-21	-5	-20	-6	-19	-7	-18	-8	-17	-9	-16	-10	-15	-11	-14	-12	-13	-13	23	
24	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-16	-8	-15	-9	-14	-10	-13	-11	-12	-12	24	
25	-26	4	-25	3	-24	2	-23	1	-22	0	-21	-1	-20	-2	-19	-3	-18	-4	-17	-5	-16	-6	-15	-7	-14	-8	-13	-9	-12	-10	-11	-11	25	
26	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-14	-6	-13	-7	-12	-8	-11	-9	-10	-10	26	
27	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-13	-5	-12	-6	-11	-7	-10	-8	-9	-9	27	
28	-23	7	-22	6	-21	5	-20	4	-19	3	-18	2	-17	1	-16	0	-15	-1	-14	-2	-13	-3	-12	-4	-11	-5	-10	-6	-9	-7	-8	-8	28	
29	-22	8	-21	7	-20	6	-19	5	-18	4	-17	3	-16	2	-15	1	-14	0	-13	-1	-12	-2	-11	-3	-10	-4	-9	-5	-8	-6	-7	-7	29	
30	-21	9	-20	8	-19	7	-18	6	-17	5	-16	4	-15	3	-14	2	-13	1	-12	0	-11	-1	-10	-2	-9	-3	-8	-4	-7	-5	-6	-6	30	
31	-20	10	-19	9	-18	8	-17	7	-16	6	-15	5	-14	4	-13	3	-12	2	-11	1	-10	0	-9	-1	-8	-2	-7	-3	-6	-4	-5	-5	31	
32	-19	11	-18	10	-17	9	-16	8	-15	7	-14	6	-13	5	-12	4	-11	3	-10	2	-9	1	-8	0	-7	-1	-6	-2	-5	-3	-4	-4	32	
33	-18	12	-17	11	-16	10	-15	9	-14	8	-13	7	-12	6	-11	5	-10	4	-9	3	-8	2	-7	1	-6	0	-5	-1	-4	-2	-3	-3	33	
34	-17	13	-16	12	-15	11	-14	10	-13	9	-12	8	-11	7	-10	6	-9	5	-8	4	-7	3	-6	2	-5	1	-4	0	-3	-1	-2	-2	34	
35	-16	14	-15	13	-14	12	-13	11	-12	10	-11	9	-10	8	-9	7	-8	6	-7	5	-6	4	-5	3	-4	2	-3	1	-2	0	-1	-1	35	
36	-15	15	-14	14	-13	13	-12	12	-11	11	-10	10	-9	9	-8	8	-7	7	-6	6	-5	5	-4	4	-3	3	-2	2	-1	1	0	0	36	
37	-14	16	-13	15	-12	14	-11	13	-10	12	-9	11	-8	10	-7	9	-6	8	-5	7	-4	6	-3	5	-2	4	-1	3	0	2	1	1	37	
38	-13	17	-12	16	-11	15	-10	14	-9	13	-8	12	-7	11	-6	10	-5	9	-4	8	-3	7	-2	6	-1	5	0	4	1	3	2	2	38	
39	-12	18	-11	17	-10	16	-9	15	-8	14	-7	13	-6	12	-5	11	-4	10	-3	9	-2	8	-1	7	0	6	1	5	2	4	3	3	39	
40	-11	19	-10	18	-9	17	-8	16	-7	15	-6	14	-5	13	-4	12	-3	11	-2	10	-1	9	0	8	1	7	2	6	3	5	4	4	40	
41	-10	20	-9	19	-8	18	-7	17	-6	16	-5	15	-4	14	-3	13	-2	12	-1	11	0	10	1	9	2	8	3	7	4	6	5	5	41	
42	-9	21	-8	20	-7	19	-6	18	-5	17	-4	16	-3	15	-2	14	-1	13	0	12	1	11	2	10	3	9	4	8	5	7	6	6	42	
43	-8	22	-7	21	-6	20	-5	19	-4	18	-3	17	-2	16	-1	15	0	14	1	13	2	12	3	11	4	10	5	9	6	8	7	7	43	
44	-7	23	-6	22	-5	21	-4	20	-3	19	-2	18	-1	17	0	16	1	15	2	14	3	13	4	12	5	11	6	10	7	9	8	8	44	
45	-6	24	-5	23	-4	22	-3	21	-2	20	-1	19	0	18	1	17	2	16	3	15	4	14	5	13	6	12	7	11	8	10	9	9	45	
46	-5	25	-4	24	-3	23	-2	22	-1	21	0	20	1	19	2	18	3	17	4	16	5	15	6	14	7	13	8	12	9	11	10	10	46	
47	-4	26	-3	25	-2	24	-1	23	0	22	1	21	2	20	3	19	4	18	5	17	6	16	7	15	8	14	9	13	10	12	11	11	47	
48	-3	27	-2	26	-1	25	0	24	1	23	2	22	3	21	4	20	5	19	6	18	7	17	8	16	9	15	10	14	11	13	12	12	48	
49	-2	28	-1	27	0	26	1	25	2	24	3	23	4	22	5	21	6	20	7	19	8	18	9	17	10	16	11	15	12	14				

Money 0 Max. value of the production cost: 42

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.02		0.05		0.07		0.10		0.12		0.14		0.17		0.19		0.21		0.24		0.26		0.29		0.31		0.33		0.36		0.38		0.40		0.43		0.45		0.48		
	100%	0%	98%	2%	95%	5%	93%	7%	90%	10%	88%	12%	86%	14%	83%	17%	81%	19%	79%	21%	76%	24%	74%	26%	71%	29%	69%	31%	67%	33%	64%	36%	62%	38%	60%	40%	57%	43%	55%	45%	52%	48%	
0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
1	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
2	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
3	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
4	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
5	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	
6	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	
7	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	
8	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	
9	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	
10	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	
11	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	
12	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	
13	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	13	
14	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	14	
15	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	-	-	15	
16	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	-	16	
17	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	-	-	17
18	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	-	-	18
19	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	-	-	19
20	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	0	0	20
21	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	0	1	21
22	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	0	2	22
23	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	0	3	23
24	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	0	4	24
25	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	0	5	25
26	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	0	6	26
27	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	0	7	27
28	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	0	8	28
29	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	0	9	29
30	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	0	10	30
31	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	0	11	31
32	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	0	12	32
33	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	0	13	33
34	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	0	14	34
35	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	0	15	35
36	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	0	16	36
37	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	0	17	37
38	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	0	18	38
39	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	0	19	39
40	0	40	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	0	20	40
41	0	41	0	40	0	39	0	38	0	37	0	36	0	35	0	34	0	33	0	32	0	31	0	30	0	29	0	28	0	27	0	26	0	25	0	24	0	23	0	22	0	21	41

Money 50

Max. value of the production cost: 42

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.02		0.05		0.07		0.10		0.12		0.14		0.17		0.19		0.21		0.24		0.26		0.29		0.31		0.33		0.36		0.38		0.40		0.43		0.45		0.48		
	100%	0%	98%	2%	95%	5%	93%	7%	90%	10%	88%	12%	86%	14%	83%	17%	81%	19%	79%	21%	76%	24%	74%	26%	71%	29%	69%	31%	67%	33%	64%	36%	62%	38%	60%	40%	57%	43%	55%	45%	52%	48%	
0	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	-50	-19	-50	-20	0
1	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	-50	-19	1
2	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	2
3	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	3
4	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	4
5	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	-50	-15	5
6	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	-50	-14	6
7	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	-50	-13	7
8	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	-50	-12	8
9	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	-50	-11	9
10	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	-50	-10	10
11	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	-50	-9	11
12	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	-50	-8	12
13	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	-50	-7	13
14	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-50	-5	-50	-6	14
15	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-50	-3	-50	-4	-49	-5	15
16	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-50	-1	-50	-2	-49	-3	-48	-4	16
17	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-50	1	-50	0	-49	-1	-48	-2	-47	-3	17
18	-50	18	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-50	3	-50	2	-49	1	-48	0	-47	-1	-46	-2	18
19	-50	19	-50	18	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-50	5	-50	4	-49	3	-48	2	-47	1	-46	0	-45	-1	19
20	-50	20	-50	19	-50	18	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-50	7	-50	6	-49	5	-48	4	-47	3	-46	2	-45	1	-44	0	20
21	-50	21	-50	20	-50	19	-50	18	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-50	9	-50	8	-49	7	-48	6	-47	5	-46	4	-45	3	-44	2	-43	1	21
22	-50	22	-50	21	-50	20	-50	19	-50	18	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-50	11	-50	10	-49	9	-48	8	-47	7	-46	6	-45	5	-44	4	-43	3	-42	2	22
23	-50	23	-50	22	-50	21	-50	20	-50	19	-50	18	-50	17	-50	16	-50	15	-50	14	-50	13	-50	12	-49	11	-48	10	-47	9	-46	8	-45	7	-44	6	-43	5	-42	4	-41	3	23
24	-50	24	-50	23	-50	22	-50	21	-50	20	-50	19	-50	18	-50	17	-50	16	-50	15	-50	14	-49	13	-48	12	-47	11	-46	10	-45	9	-44	8	-43	7	-42	6	-41	5	-40	4	24
25	-50	25	-50	24	-50	23	-50	22	-50	21	-50	20	-50	19	-50	18	-50	17	-50	16	-49	15	-48	14	-47	13	-46	12	-45	11	-44	10	-43	9	-42	8	-41	7	-40	6	-39	5	25
26	-50	26	-50	25	-50	24	-50	23	-50	22	-50	21	-50	20	-50	19	-50	18	-49	17	-48	16	-47	15	-46	14	-45	13	-44	12	-43	11	-42	10	-41	9	-40	8	-39	7	-38	6	26
27	-50	27	-50	26	-50	25	-50	24	-50	23	-50	22	-50	21	-50	20	-49	19	-48	18	-47	17	-46	16	-45	15	-44	14	-43	13	-42	12	-41	11	-40	10	-39	9	-38	8	-37	7	27
28	-50	28	-50	27	-50	26	-50	25	-50	24	-50	23	-50	22	-49	21	-48	20	-47	19	-46	18	-45	17	-44	16	-43	15	-42	14	-41	13	-40	12	-39	11	-38	10	-37	9	-36	8	28
29	-50	29	-50	28	-50	27	-50	26	-50	25	-50	24	-49	23	-48	22	-47	21	-46	20	-45	19	-44	18	-43	17	-42	16	-41	15	-40	14	-39	13	-38	12	-37	11	-36	10	-35	9	29
30	-50	30	-50	29	-50	28	-50	27	-50	26	-49	25	-48	24	-47	23	-46	22	-45	21	-44	20	-43	19	-42	18	-41	17	-40	16	-39	15	-38	14	-37	13	-36	12	-35	11	-34	10	30
31	-50	31	-50	30	-50	29	-50	28	-49	27	-48	26	-47	25	-46	24	-45	23	-44	22	-43	21	-42	20	-41	19	-40	18	-39	17	-38	16	-37	15	-36	14	-35	13	-34	12	-33	11	31
32	-50	32	-50	31	-50	30	-49	29	-48	28	-47	27	-46	26	-45	25	-44	24	-43	23	-42	22	-41	21	-40	20	-39	19	-38	18	-37	17	-36	16	-35	15	-34	14	-33	13	-32	12	32
33	-50	33	-50	32	-49	31	-48	30	-47	29	-46	28	-45	27	-44	26	-43	25	-42	24	-41	23	-40	22	-39	21	-38	20	-37	19	-36	18	-35	17	-34	16	-33	15	-32	14	-31	13	33
34	-50	34	-49	33	-48	32	-47	31	-46	30	-45	29	-44	28	-43	27	-42	26	-41	25	-40	24	-39	23	-38	22	-37	21	-36	20	-35	19	-34	18	-33	17	-32	16	-31	15	-30	14	34
35	-49	35	-48	34	-47	33	-46	32	-45	31	-44	30	-43	29	-42	28	-41	27	-40	26	-39	25	-38	24	-37	23	-36	22	-35	21	-34	20	-33	19	-32	18	-31	17	-30	16	-29	15	35
36	-48	36	-47	35	-46	34	-45	33	-44	32	-43	31	-42	30	-41	29	-40	28	-39	27	-38	26	-37	25	-36	24	-35	23	-34	22	-33	21	-32	20	-31	19	-30	18	-29	17	-28	16	36
37	-47	37	-46	36	-45	35	-44	34	-43	33	-42	32	-41	31	-40	30	-39	29	-38	28	-37	27	-36																				

Money 50

Max. value of the production cost: 42

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Selling price	21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		Selling price				
	0.50		0.52		0.55		0.57		0.60		0.62		0.64		0.67		0.69		0.71		0.74		0.76		0.79		0.81		0.83		0.86		0.88		0.90		0.93		0.95		0.98		1.00						
	50%	50%	48%	52%	45%	55%	43%	57%	40%	60%	38%	62%	36%	64%	33%	67%	31%	69%	29%	71%	26%	74%	24%	76%	21%	79%	19%	81%	17%	83%	14%	86%	12%	88%	10%	90%	7%	93%	5%	95%	2%	98%	0%	100%					
0	-50	-21	-50	-22	-50	-23	-50	-24	-50	-25	-50	-26	-50	-27	-50	-28	-50	-29	-50	-30	-50	-31	-50	-32	-50	-33	-50	-34	-49	-35	-48	-36	-47	-37	-46	-38	-45	-39	-44	-40	-43	-41	-42	-42	0				
1	-50	-20	-50	-21	-50	-22	-50	-23	-50	-24	-50	-25	-50	-26	-50	-27	-50	-28	-50	-29	-50	-30	-50	-31	-50	-32	-49	-31	-48	-32	-47	-33	-46	-34	-45	-35	-44	-36	-43	-37	-42	-38	-43	-39	-42	-40	-41	-41	1
2	-50	-19	-50	-20	-50	-21	-50	-22	-50	-23	-50	-24	-50	-25	-50	-26	-50	-27	-50	-28	-50	-29	-50	-30	-49	-31	-48	-32	-47	-33	-46	-34	-45	-35	-44	-36	-43	-37	-42	-38	-43	-37	-42	-38	-41	-39	-40	-40	2
3	-50	-18	-50	-19	-50	-20	-50	-21	-50	-22	-50	-23	-50	-24	-50	-25	-50	-26	-50	-27	-50	-28	-49	-29	-48	-30	-47	-31	-46	-32	-45	-33	-44	-34	-43	-35	-42	-36	-41	-37	-40	-38	-41	-39	-40	-39	-39	3	
4	-50	-17	-50	-18	-50	-19	-50	-20	-50	-21	-50	-22	-50	-23	-50	-24	-50	-25	-50	-26	-49	-27	-48	-28	-47	-29	-46	-30	-45	-31	-44	-32	-43	-33	-42	-34	-41	-35	-40	-36	-39	-37	-38	-38	-38	4			
5	-50	-16	-50	-17	-50	-18	-50	-19	-50	-20	-50	-21	-50	-22	-50	-23	-50	-24	-49	-25	-48	-26	-47	-27	-46	-28	-45	-29	-44	-30	-43	-31	-42	-32	-41	-33	-40	-34	-39	-35	-38	-35	-38	-37	-37	-37	5		
6	-50	-15	-50	-16	-50	-17	-50	-18	-50	-19	-50	-20	-50	-21	-50	-22	-49	-23	-48	-24	-47	-25	-46	-26	-45	-27	-44	-28	-43	-29	-42	-30	-41	-31	-40	-32	-39	-33	-38	-34	-37	-35	-37	-35	-36	-36	6		
7	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	-50	-19	-50	-20	-49	-21	-48	-22	-47	-23	-46	-24	-45	-25	-44	-26	-43	-27	-42	-28	-41	-29	-40	-30	-39	-31	-38	-32	-37	-33	-36	-34	-35	-35	-35	7			
8	-50	-13	-50	-14	-50	-15	-50	-16	-50	-17	-50	-18	-49	-19	-48	-20	-47	-21	-46	-22	-45	-23	-44	-24	-43	-25	-42	-26	-41	-27	-40	-28	-39	-29	-38	-30	-37	-31	-36	-32	-35	-33	-34	-34	-34	8			
9	-50	-12	-50	-13	-50	-14	-50	-15	-50	-16	-49	-17	-48	-18	-47	-19	-46	-20	-45	-21	-44	-22	-43	-23	-42	-24	-41	-25	-40	-26	-39	-27	-38	-28	-37	-29	-36	-30	-35	-31	-34	-32	-33	-33	-33	9			
10	-50	-11	-50	-12	-50	-13	-50	-14	-49	-15	-48	-16	-47	-17	-46	-18	-45	-19	-44	-20	-43	-21	-42	-22	-41	-23	-40	-24	-39	-25	-38	-26	-37	-27	-36	-28	-35	-29	-34	-30	-33	-31	-32	-32	-32	10			
11	-50	-10	-50	-11	-50	-12	-49	-13	-48	-14	-47	-15	-46	-16	-45	-17	-44	-18	-43	-19	-42	-20	-41	-21	-40	-22	-39	-23	-38	-24	-37	-25	-36	-26	-35	-27	-34	-28	-33	-29	-32	-30	-31	-31	-31	11			
12	-50	-9	-50	-10	-49	-11	-48	-12	-47	-13	-46	-14	-45	-15	-44	-16	-43	-17	-42	-18	-41	-19	-40	-20	-39	-21	-38	-22	-37	-23	-36	-24	-35	-25	-34	-26	-33	-27	-32	-28	-31	-29	-30	-30	-30	12			
13	-50	-8	-49	-9	-48	-10	-47	-11	-46	-12	-45	-13	-44	-14	-43	-15	-42	-16	-41	-17	-40	-18	-39	-19	-38	-20	-37	-21	-36	-22	-35	-23	-34	-24	-33	-25	-32	-26	-31	-27	-30	-28	-29	-29	-29	13			
14	-49	-7	-48	-8	-47	-9	-46	-10	-45	-11	-44	-12	-43	-13	-42	-14	-41	-15	-40	-16	-39	-17	-38	-18	-37	-19	-36	-20	-35	-21	-34	-22	-33	-23	-32	-24	-31	-25	-30	-26	-29	-27	-28	-28	-28	14			
15	-48	-6	-47	-7	-46	-8	-45	-9	-44	-10	-43	-11	-42	-12	-41	-13	-40	-14	-39	-15	-38	-16	-37	-17	-36	-18	-35	-19	-34	-20	-33	-21	-32	-22	-31	-23	-30	-24	-29	-25	-28	-26	-27	-27	-27	15			
16	-47	-5	-46	-6	-45	-7	-44	-8	-43	-9	-42	-10	-41	-11	-40	-12	-39	-13	-38	-14	-37	-15	-36	-16	-35	-17	-34	-18	-33	-19	-32	-20	-31	-21	-30	-22	-29	-23	-28	-24	-27	-25	-26	-26	-26	16			
17	-46	-4	-45	-5	-44	-6	-43	-7	-42	-8	-41	-9	-40	-10	-39	-11	-38	-12	-37	-13	-36	-14	-35	-15	-34	-16	-33	-17	-32	-18	-31	-19	-30	-20	-29	-21	-28	-22	-27	-23	-26	-24	-25	-25	-25	17			
18	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	-39	-9	-38	-10	-37	-11	-36	-12	-35	-13	-34	-14	-33	-15	-32	-16	-31	-17	-30	-18	-29	-19	-28	-20	-27	-21	-26	-22	-25	-23	-24	-24	-24	18			
19	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	-38	-8	-37	-9	-36	-10	-35	-11	-34	-12	-33	-13	-32	-14	-31	-15	-30	-16	-29	-17	-28	-18	-27	-19	-26	-20	-25	-21	-24	-22	-23	-23	-23	19			
20	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	-37	-7	-36	-8	-35	-9	-34	-10	-33	-11	-32	-12	-31	-13	-30	-14	-29	-15	-28	-16	-27	-17	-26	-18	-25	-19	-24	-20	-23	-21	-22	-22	-22	20			
21	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-25	-17	-24	-18	-23	-19	-22	-20	-21	-21	-21	21			
22	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-24	-16	-23	-17	-22	-18	-21	-19	-20	-20	-20	22			
23	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	-34	-4	-33	-5	-32	-6	-31	-7	-30	-8	-29	-9	-28	-10	-27	-11	-26	-12	-25	-13	-24	-14	-23	-15	-22	-16	-21	-17	-20	-18	-19	-19	-19	23			
24	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	-33	-3	-32	-4	-31	-5	-30	-6	-29	-7	-28	-8	-27	-9	-26	-10	-25	-11	-24	-12	-23	-13	-22	-14	-21	-15	-20	-16	-19	-17	-18	-18	-18	24			
25	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	-32	-2	-31	-3	-30	-4	-29	-5	-28	-6	-27	-7	-26	-8	-25	-9	-24	-10	-23	-11	-22	-12	-21	-13	-20	-14	-19	-15	-18	-16	-17	-17	-17	25			
26	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-20	-12	-19	-13	-18	-14	-17	-15	-16	-16	-16	26			
27	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	-30	0	-29	-1	-28	-2	-27	-3	-26	-4	-25	-5	-24	-6	-23	-7	-22	-8	-21	-9	-20	-10	-19	-11	-18	-12	-17	-13	-16	-14	-15	-15	-15	27			
28	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-18	-10	-17	-11	-16	-12	-15	-13	-14	-14	-14	28			
29	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	-28	2	-27	1	-26	0	-25	-1	-24	-2	-23	-3	-22	-4	-21	-5	-20	-6	-19	-7	-18	-8	-17	-9	-16	-10	-15	-11	-14	-12	-13	-13	-13	29			
30	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-16	-8	-15	-9	-14	-10	-13	-11	-12	-12	-12	30			
31	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	-26	4	-25	3	-24	2	-23	1	-22	0	-21	-1	-20	-2	-19	-3	-18	-4	-17	-5	-16	-6	-15	-7	-14	-8	-13	-9	-12	-10	-11	-11	-11	31			
32	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-14	-6	-13	-7	-12	-8	-11	-9	-10	-10	-10	32			
33	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-13	-5	-12	-6	-11	-7	-10	-8	-9	-9	-9	33			
34	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	-23	7	-22	6	-21	5	-20	4	-19	3</																											

Money 100 Max. value of the production cost: 42

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

	0		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		
	0.00		0.02		0.05		0.07		0.10		0.12		0.14		0.17		0.19		0.21		0.24		0.26		0.29		0.31		0.33		0.36		0.38		0.40		0.43		0.45		0.48		
	100%	0%	98%	2%	95%	5%	93%	7%	90%	10%	88%	12%	86%	14%	83%	17%	81%	19%	79%	21%	76%	24%	74%	26%	71%	29%	69%	31%	67%	33%	64%	36%	62%	38%	60%	40%	57%	43%	55%	45%	52%	48%	
0	-84	0	-83	-1	-82	-2	-81	-3	-80	-4	-79	-5	-78	-6	-77	-7	-76	-8	-75	-9	-74	-10	-73	-11	-72	-12	-71	-13	-70	-14	-69	-15	-68	-16	-67	-17	-66	-18	-65	-19	-64	-20	0
1	-83	1	-82	0	-81	-1	-80	-2	-79	-3	-78	-4	-77	-5	-76	-6	-75	-7	-74	-8	-73	-9	-72	-10	-71	-11	-70	-12	-69	-13	-68	-14	-67	-15	-66	-16	-65	-17	-64	-18	-63	-19	1
2	-82	2	-81	1	-80	0	-79	-1	-78	-2	-77	-3	-76	-4	-75	-5	-74	-6	-73	-7	-72	-8	-71	-9	-70	-10	-69	-11	-68	-12	-67	-13	-66	-14	-65	-15	-64	-16	-63	-17	-62	-18	2
3	-81	3	-80	2	-79	1	-78	0	-77	-1	-76	-2	-75	-3	-74	-4	-73	-5	-72	-6	-71	-7	-70	-8	-69	-9	-68	-10	-67	-11	-66	-12	-65	-13	-64	-14	-63	-15	-62	-16	-61	-17	3
4	-80	4	-79	3	-78	2	-77	1	-76	0	-75	-1	-74	-2	-73	-3	-72	-4	-71	-5	-70	-6	-69	-7	-68	-8	-67	-9	-66	-10	-65	-11	-64	-12	-63	-13	-62	-14	-61	-15	-60	-16	4
5	-79	5	-78	4	-77	3	-76	2	-75	1	-74	0	-73	-1	-72	-2	-71	-3	-70	-4	-69	-5	-68	-6	-67	-7	-66	-8	-65	-9	-64	-10	-63	-11	-62	-12	-61	-13	-60	-14	-59	-15	5
6	-78	6	-77	5	-76	4	-75	3	-74	2	-73	1	-72	0	-71	-1	-70	-2	-69	-3	-68	-4	-67	-5	-66	-6	-65	-7	-64	-8	-63	-9	-62	-10	-61	-11	-60	-12	-59	-13	-58	-14	6
7	-77	7	-76	6	-75	5	-74	4	-73	3	-72	2	-71	1	-70	0	-69	-1	-68	-2	-67	-3	-66	-4	-65	-5	-64	-6	-63	-7	-62	-8	-61	-9	-60	-10	-59	-11	-58	-12	-57	-13	7
8	-76	8	-75	7	-74	6	-73	5	-72	4	-71	3	-70	2	-69	1	-68	0	-67	-1	-66	-2	-65	-3	-64	-4	-63	-5	-62	-6	-61	-7	-60	-8	-59	-9	-58	-10	-57	-11	-56	-12	8
9	-75	9	-74	8	-73	7	-72	6	-71	5	-70	4	-69	3	-68	2	-67	1	-66	0	-65	-1	-64	-2	-63	-3	-62	-4	-61	-5	-60	-6	-59	-7	-58	-8	-57	-9	-56	-10	-55	-11	9
10	-74	10	-73	9	-72	8	-71	7	-70	6	-69	5	-68	4	-67	3	-66	2	-65	1	-64	0	-63	-1	-62	-2	-61	-3	-60	-4	-59	-5	-58	-6	-57	-7	-56	-8	-55	-9	-54	-10	10
11	-73	11	-72	10	-71	9	-70	8	-69	7	-68	6	-67	5	-66	4	-65	3	-64	2	-63	1	-62	0	-61	-1	-60	-2	-59	-3	-58	-4	-57	-5	-56	-6	-55	-7	-54	-8	-53	-9	11
12	-72	12	-71	11	-70	10	-69	9	-68	8	-67	7	-66	6	-65	5	-64	4	-63	3	-62	2	-61	1	-60	0	-59	-1	-58	-2	-57	-3	-56	-4	-55	-5	-54	-6	-53	-7	-52	-8	12
13	-71	13	-70	12	-69	11	-68	10	-67	9	-66	8	-65	7	-64	6	-63	5	-62	4	-61	3	-60	2	-59	1	-58	0	-57	-1	-56	-2	-55	-3	-54	-4	-53	-5	-52	-6	-51	-7	13
14	-70	14	-69	13	-68	12	-67	11	-66	10	-65	9	-64	8	-63	7	-62	6	-61	5	-60	4	-59	3	-58	2	-57	1	-56	0	-55	-1	-54	-2	-53	-3	-52	-4	-51	-5	-50	-6	14
15	-69	15	-68	14	-67	13	-66	12	-65	11	-64	10	-63	9	-62	8	-61	7	-60	6	-59	5	-58	4	-57	3	-56	2	-55	1	-54	0	-53	-1	-52	-2	-51	-3	-50	-4	-49	-5	15
16	-68	16	-67	15	-66	14	-65	13	-64	12	-63	11	-62	10	-61	9	-60	8	-59	7	-58	6	-57	5	-56	4	-55	3	-54	2	-53	1	-52	0	-51	-1	-50	-2	-49	-3	-48	-4	16
17	-67	17	-66	16	-65	15	-64	14	-63	13	-62	12	-61	11	-60	10	-59	9	-58	8	-57	7	-56	6	-55	5	-54	4	-53	3	-52	2	-51	1	-50	0	-49	-1	-48	-2	-47	-3	17
18	-66	18	-65	17	-64	16	-63	15	-62	14	-61	13	-60	12	-59	11	-58	10	-57	9	-56	8	-55	7	-54	6	-53	5	-52	4	-51	3	-50	2	-49	1	-48	0	-47	-1	-46	-2	18
19	-65	19	-64	18	-63	17	-62	16	-61	15	-60	14	-59	13	-58	12	-57	11	-56	10	-55	9	-54	8	-53	7	-52	6	-51	5	-50	4	-49	3	-48	2	-47	1	-46	0	-45	-1	19
20	-64	20	-63	19	-62	18	-61	17	-60	16	-59	15	-58	14	-57	13	-56	12	-55	11	-54	10	-53	9	-52	8	-51	7	-50	6	-49	5	-48	4	-47	3	-46	2	-45	1	-44	0	20
21	-63	21	-62	20	-61	19	-60	18	-59	17	-58	16	-57	15	-56	14	-55	13	-54	12	-53	11	-52	10	-51	9	-50	8	-49	7	-48	6	-47	5	-46	4	-45	3	-44	2	-43	1	21
22	-62	22	-61	21	-60	20	-59	19	-58	18	-57	17	-56	16	-55	15	-54	14	-53	13	-52	12	-51	11	-50	10	-49	9	-48	8	-47	7	-46	6	-45	5	-44	4	-43	3	-42	2	22
23	-61	23	-60	22	-59	21	-58	20	-57	19	-56	18	-55	17	-54	16	-53	15	-52	14	-51	13	-50	12	-49	11	-48	10	-47	9	-46	8	-45	7	-44	6	-43	5	-42	4	-41	3	23
24	-60	24	-59	23	-58	22	-57	21	-56	20	-55	19	-54	18	-53	17	-52	16	-51	15	-50	14	-49	13	-48	12	-47	11	-46	10	-45	9	-44	8	-43	7	-42	6	-41	5	-40	4	24
25	-59	25	-58	24	-57	23	-56	22	-55	21	-54	20	-53	19	-52	18	-51	17	-50	16	-49	15	-48	14	-47	13	-46	12	-45	11	-44	10	-43	9	-42	8	-41	7	-40	6	-39	5	25
26	-58	26	-57	25	-56	24	-55	23	-54	22	-53	22	-52	21	-51	20	-49	19	-48	17	-47	16	-46	15	-45	14	-44	13	-43	12	-42	11	-41	10	-40	9	-39	8	-38	7	-37	6	26
27	-57	27	-56	26	-55	25	-54	24	-53	23	-52	22	-51	21	-50	20	-49	19	-48	18	-47	17	-46	16	-45	15	-44	14	-43	13	-42	12	-41	11	-40	10	-39	9	-38	8	-37	7	27
28	-56	28	-55	27	-54	26	-53	25	-52	24	-51	23	-50	22	-49	21	-48	20	-47	19	-46	18	-45	17	-44	16	-43	15	-42	14	-41	13	-40	12	-39	11	-38	10	-37	9	-36	8	28
29	-55	29	-54	28	-53	27	-52	26	-51	25	-50	24	-49	23	-48	22	-47	21	-46	20	-45	19	-44	18	-43	17	-42	16	-41	15	-40	14	-39	13	-38	12	-37	11	-36	10	-35	9	29
30	-54	30	-53	29	-52	28	-51	27	-50	26	-49	25	-48	24	-47	23	-46	22	-45	21	-44	20	-43	19	-42	18	-41	17	-40	16	-39	15	-38	14	-37	13	-36	12	-35	11	-34	10	30
31	-53	31	-52	30	-51	29	-50	28	-49	27	-48	26	-47	25	-46	24	-45	23	-44	22	-43	21	-42	20	-41	19	-40	18	-39	17	-38	16	-37	15	-36	14	-35	13	-34	12	-33	11	31
32	-52	32	-51	31	-50	30	-49	29	-48	28	-47	27	-46	26	-45	25	-44	24	-43	23	-42	22	-41	21	-40	20	-39	19	-38	18	-37	17	-36	16	-35	15	-34	14	-33	13	-32	12	32
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34	-50	34	-49	33	-48	32	-47	31	-46	30	-45	29	-44	28	-43	27	-42	26	-41	25	-40	24	-39	23	-38	22	-37	21	-36	20	-35	19	-34	18	-33	17	-32	16	-31	15	-30	14	34
35	-49	35	-48	34	-47	33	-46	32	-45	31	-44	30	-43	29	-42	28	-41	27	-40	26	-39	25	-38	24	-37	23	-36	22	-35	21	-34	20	-33	19	-32	18	-31	17	-30	16	-29	15	35
36	-48	36	-47	35	-46	34	-45	33	-44	32	-43	31	-42	30	-41	29	-40	28	-39	27	-38	26	-37	25	-36	24	-35	23	-34	22	-33	21	-32	20	-31	19	-30	18	-29	17	-28	16	36
37	-47	37	-46	36	-45	35	-44	34	-43	33	-42	32	-41	31	-40	30	-39	29	-38	28	-37	27	-36	26	-35	25	-																

Money 100 Max. value of the production cost: 42

1st line: production cost 2nd line: quality 3rd line (green: prob. that the experimenter detects blue: prob. that the experimenter does not detect)

Selling price	21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		0	
	0.50		0.52		0.55		0.57		0.60		0.62		0.64		0.67		0.69		0.71		0.74		0.76		0.79		0.81		0.83		0.86		0.88		0.90		0.93		0.95		0.98		1.00			
	50%	50%	48%	52%	45%	55%	43%	57%	40%	60%	38%	62%	36%	64%	33%	67%	31%	69%	29%	71%	26%	74%	24%	76%	21%	79%	19%	81%	17%	83%	14%	86%	12%	88%	10%	90%	7%	93%	5%	95%	2%	98%	0%	100%		
0	-63	-21	-62	-22	-61	-23	-60	-24	-59	-25	-58	-26	-57	-27	-56	-28	-55	-29	-54	-30	-53	-31	-52	-32	-51	-33	-50	-34	-49	-35	-48	-36	-47	-37	-46	-38	-45	-39	-44	-40	-43	-41	-42	-42	0	
1	-62	-20	-61	-21	-60	-22	-59	-23	-58	-24	-57	-25	-56	-26	-55	-27	-54	-28	-53	-29	-52	-30	-51	-31	-50	-32	-49	-33	-48	-34	-47	-35	-46	-36	-45	-37	-44	-38	-43	-39	-42	-40	-41	-41	-41	1
2	-61	-19	-60	-20	-59	-21	-58	-22	-57	-23	-56	-24	-55	-25	-54	-26	-53	-27	-52	-28	-51	-29	-50	-30	-49	-31	-48	-32	-47	-33	-46	-34	-45	-35	-44	-36	-43	-37	-42	-38	-41	-39	-40	-40	-40	2
3	-60	-18	-59	-19	-58	-20	-57	-21	-56	-22	-55	-23	-54	-24	-53	-25	-52	-26	-51	-27	-50	-28	-49	-29	-48	-30	-47	-31	-46	-32	-45	-33	-44	-34	-43	-35	-42	-36	-41	-37	-40	-38	-39	-39	-39	3
4	-59	-17	-58	-18	-57	-19	-56	-20	-55	-21	-54	-22	-53	-23	-52	-24	-51	-25	-50	-26	-49	-27	-48	-28	-47	-29	-46	-30	-45	-31	-44	-32	-43	-33	-42	-34	-41	-35	-40	-36	-39	-37	-38	-38	-38	4
5	-58	-16	-57	-17	-56	-18	-55	-19	-54	-20	-53	-21	-52	-22	-51	-23	-50	-24	-49	-25	-48	-26	-47	-27	-46	-28	-45	-29	-44	-30	-43	-31	-42	-32	-41	-33	-40	-34	-39	-35	-38	-37	-37	-37	5	
6	-57	-15	-56	-16	-55	-17	-54	-18	-53	-19	-52	-20	-51	-21	-50	-22	-49	-23	-48	-24	-47	-25	-46	-26	-45	-27	-44	-28	-43	-29	-42	-30	-41	-31	-40	-32	-39	-33	-38	-34	-37	-35	-36	-36	-36	6
7	-56	-14	-55	-15	-54	-16	-53	-17	-52	-18	-51	-19	-50	-20	-49	-21	-48	-22	-47	-23	-46	-24	-45	-25	-44	-26	-43	-27	-42	-28	-41	-29	-40	-30	-39	-31	-38	-32	-37	-33	-36	-34	-35	-35	-35	7
8	-55	-13	-54	-14	-53	-15	-52	-16	-51	-17	-50	-18	-49	-19	-48	-20	-47	-21	-46	-22	-45	-23	-44	-24	-43	-25	-42	-26	-41	-27	-40	-28	-39	-29	-38	-30	-37	-31	-36	-32	-35	-33	-34	-34	-34	8
9	-54	-12	-53	-13	-52	-14	-51	-15	-50	-16	-49	-17	-48	-18	-47	-19	-46	-20	-45	-21	-44	-22	-43	-23	-42	-24	-41	-25	-40	-26	-39	-27	-38	-28	-37	-29	-36	-30	-35	-31	-34	-32	-33	-33	-33	9
10	-53	-11	-52	-12	-51	-13	-50	-14	-49	-15	-48	-16	-47	-17	-46	-18	-45	-19	-44	-20	-43	-21	-42	-22	-41	-23	-40	-24	-39	-25	-38	-26	-37	-27	-36	-28	-35	-29	-34	-30	-33	-31	-32	-32	-32	10
11	-52	-10	-51	-11	-50	-12	-49	-13	-48	-14	-47	-15	-46	-16	-45	-17	-44	-18	-43	-19	-42	-20	-41	-21	-40	-22	-39	-23	-38	-24	-37	-25	-36	-26	-35	-27	-34	-28	-33	-29	-32	-30	-31	-31	-31	11
12	-51	-9	-50	-10	-49	-11	-48	-12	-47	-13	-46	-14	-45	-15	-44	-16	-43	-17	-42	-18	-41	-19	-40	-20	-39	-21	-38	-22	-37	-23	-36	-24	-35	-25	-34	-26	-33	-27	-32	-28	-31	-29	-30	-30	-30	12
13	-50	-8	-49	-9	-48	-10	-47	-11	-46	-12	-45	-13	-44	-14	-43	-15	-42	-16	-41	-17	-40	-18	-39	-19	-38	-20	-37	-21	-36	-22	-35	-23	-34	-24	-33	-25	-32	-26	-31	-27	-30	-28	-29	-29	-29	13
14	-49	-7	-48	-8	-47	-9	-46	-10	-45	-11	-44	-12	-43	-13	-42	-14	-41	-15	-40	-16	-39	-17	-38	-18	-37	-19	-36	-20	-35	-21	-34	-22	-33	-23	-32	-24	-31	-25	-30	-26	-29	-27	-28	-28	-28	14
15	-48	-6	-47	-7	-46	-8	-45	-9	-44	-10	-43	-11	-42	-12	-41	-13	-40	-14	-39	-15	-38	-16	-37	-17	-36	-18	-35	-19	-34	-20	-33	-21	-32	-22	-31	-23	-30	-24	-29	-25	-28	-26	-27	-27	-27	15
16	-47	-5	-46	-6	-45	-7	-44	-8	-43	-9	-42	-10	-41	-11	-40	-12	-39	-13	-38	-14	-37	-15	-36	-16	-35	-17	-34	-18	-33	-19	-32	-20	-31	-21	-30	-22	-29	-23	-28	-24	-27	-25	-26	-26	-26	16
17	-46	-4	-45	-5	-44	-6	-43	-7	-42	-8	-41	-9	-40	-10	-39	-11	-38	-12	-37	-13	-36	-14	-35	-15	-34	-16	-33	-17	-32	-18	-31	-19	-30	-20	-29	-21	-28	-22	-27	-23	-26	-24	-25	-25	-25	17
18	-45	-3	-44	-4	-43	-5	-42	-6	-41	-7	-40	-8	-39	-9	-38	-10	-37	-11	-36	-12	-35	-13	-34	-14	-33	-15	-32	-16	-31	-17	-30	-18	-29	-19	-28	-20	-27	-21	-26	-22	-25	-23	-24	-24	-24	18
19	-44	-2	-43	-3	-42	-4	-41	-5	-40	-6	-39	-7	-38	-8	-37	-9	-36	-10	-35	-11	-34	-12	-33	-13	-32	-14	-31	-15	-30	-16	-29	-17	-28	-18	-27	-19	-26	-20	-25	-21	-24	-22	-23	-23	-23	19
20	-43	-1	-42	-2	-41	-3	-40	-4	-39	-5	-38	-6	-37	-7	-36	-8	-35	-9	-34	-10	-33	-11	-32	-12	-31	-13	-30	-14	-29	-15	-28	-16	-27	-17	-26	-18	-25	-19	-24	-20	-23	-21	-22	-22	-22	20
21	-42	0	-41	-1	-40	-2	-39	-3	-38	-4	-37	-5	-36	-6	-35	-7	-34	-8	-33	-9	-32	-10	-31	-11	-30	-12	-29	-13	-28	-14	-27	-15	-26	-16	-25	-17	-24	-18	-23	-19	-22	-20	-21	-21	-21	21
22	-41	1	-40	0	-39	-1	-38	-2	-37	-3	-36	-4	-35	-5	-34	-6	-33	-7	-32	-8	-31	-9	-30	-10	-29	-11	-28	-12	-27	-13	-26	-14	-25	-15	-24	-16	-23	-17	-22	-18	-21	-19	-20	-20	-20	22
23	-40	2	-39	1	-38	0	-37	-1	-36	-2	-35	-3	-34	-4	-33	-5	-32	-6	-31	-7	-30	-8	-29	-9	-28	-10	-27	-11	-26	-12	-25	-13	-24	-14	-23	-15	-22	-16	-21	-17	-20	-18	-19	-19	-19	23
24	-39	3	-38	2	-37	1	-36	0	-35	-1	-34	-2	-33	-3	-32	-4	-31	-5	-30	-6	-29	-7	-28	-8	-27	-9	-26	-10	-25	-11	-24	-12	-23	-13	-22	-14	-21	-15	-20	-16	-19	-17	-18	-18	-18	24
25	-38	4	-37	3	-36	2	-35	1	-34	0	-33	-1	-32	-2	-31	-3	-30	-4	-29	-5	-28	-6	-27	-7	-26	-8	-25	-9	-24	-10	-23	-11	-22	-12	-21	-13	-20	-14	-19	-15	-18	-16	-17	-17	-17	25
26	-37	5	-36	4	-35	3	-34	2	-33	1	-32	0	-31	-1	-30	-2	-29	-3	-28	-4	-27	-5	-26	-6	-25	-7	-24	-8	-23	-9	-22	-10	-21	-11	-20	-12	-19	-13	-18	-14	-17	-15	-16	-16	-16	26
27	-36	6	-35	5	-34	4	-33	3	-32	2	-31	1	-30	0	-29	-1	-28	-2	-27	-3	-26	-4	-25	-5	-24	-6	-23	-7	-22	-8	-21	-9	-20	-10	-19	-11	-18	-12	-17	-13	-16	-14	-15	-15	-15	27
28	-35	7	-34	6	-33	5	-32	4	-31	3	-30	2	-29	1	-28	0	-27	-1	-26	-2	-25	-3	-24	-4	-23	-5	-22	-6	-21	-7	-20	-8	-19	-9	-18	-10	-17	-11	-16	-12	-15	-13	-14	-14	-14	28
29	-34	8	-33	7	-32	6	-31	5	-30	4	-29	3	-28	2	-27	1	-26	0	-25	-1	-24	-2	-23	-3	-22	-4	-21	-5	-20	-6	-19	-7	-18	-8	-17	-9	-16	-10	-15	-11	-14	-12	-13	-13	-13	29
30	-33	9	-32	8	-31	7	-30	6	-29	5	-28	4	-27	3	-26	2	-25	1	-24	0	-23	-1	-22	-2	-21	-3	-20	-4	-19	-5	-18	-6	-17	-7	-16	-8	-15	-9	-14	-10	-13	-11	-12	-12	-12	30
31	-32	10	-31	9	-30	8	-29	7	-28	6	-27	5	-26	4	-25	3	-24	2	-23	1	-22	0	-21	-1	-20	-2	-19	-3	-18	-4	-17	-5	-16	-6	-15	-7	-14	-8	-13	-9	-12	-10	-11	-11	-11	31
32	-31	11	-30	10	-29	9	-28	8	-27	7	-26	6	-25	5	-24	4	-23	3	-22	2	-21	1	-20	0	-19	-1	-18	-2	-17	-3	-16	-4	-15	-5	-14	-6	-13	-7	-12	-8	-11	-9	-10	-10	-10	32
33	-30	12	-29	11	-28	10	-27	9	-26	8	-25	7	-24	6	-23	5	-22	4	-21	3	-20	2	-19	1	-18	0	-17	-1	-16	-2	-15	-3	-14	-4	-13	-5	-12	-6	-11	-7	-10	-8	-9	-9	-9	33
34	-29	13	-28	12	-27	11	-26	10	-25	9	-24	8	-23	7	-22	6	-21	5	-20	4	-19	3	-18	2	-17	1	-16	0	-15	-1	-14	-2	-13	-3	-12	-4	-11	-5	-10							

5. Raw data of the experiment

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=no)	Detection (1=yes, 0=no)	Profit
1	1	2	1	0	24	20	10	0.58	0.42	1	0	10
1	1	10	1	50	30	35	25	0.17	0.83	0	NA	0
1	1	12	1	0	36	27	22	0.39	0.61	0	NA	0
1	1	19	1	100	42	50	38	0.1	0.9	0	NA	0
1	1	1	2	0	24	40	10	0.58	0.42	0	NA	0
1	1	7	2	50	30	25	20	0.33	0.67	1	0	5
1	1	14	2	0	36	39	28	0.22	0.78	0	NA	0
1	1	18	2	100	42	45	40	0.05	0.95	0	NA	0
1	1	5	3	0	24	25	15	0.38	0.62	1	0	10
1	1	8	3	50	30	28	23	0.23	0.77	0	NA	0
1	1	15	3	0	36	45	30	0.17	0.83	0	NA	0
1	1	20	3	100	42	50	36	0.14	0.86	0	NA	0
1	1	4	4	0	24	11	8	0.67	0.33	1	1	0
1	1	9	4	50	30	39	21	0.3	0.7	0	NA	0
1	1	11	4	0	36	36	26	0.28	0.72	0	NA	0
1	1	16	4	100	42	51	23	0.45	0.55	0	NA	0
1	1	3	5	0	24	24	18	0.25	0.75	0	NA	0
1	1	6	5	50	30	35	25	0.17	0.83	0	NA	0
1	1	13	5	0	36	20	10	0.72	0.28	1	1	0
1	1	17	5	100	42	29	28	0.33	0.67	0	NA	0
1	2	3	1	50	24	19	18	0.25	0.75	1	0	1
1	2	7	1	0	30	22	18	0.4	0.6	0	NA	0
1	2	15	1	100	36	45	36	0	1	0	NA	0
1	2	17	1	0	42	25	21	0.5	0.5	0	NA	0
1	2	2	2	50	24	24	20	0.17	0.83	1	0	4
1	2	10	2	0	30	30	15	0.5	0.5	0	NA	0
1	2	13	2	100	36	40	30	0.17	0.83	0	NA	0
1	2	19	2	0	42	30	21	0.5	0.5	0	NA	0
1	2	5	3	50	24	26	22	0.08	0.92	0	NA	0
1	2	8	3	0	30	17	8	0.73	0.27	1	0	9
1	2	12	3	100	36	21	16	0.56	0.44	0	NA	0
1	2	18	3	0	42	36	30	0.29	0.71	0	NA	0
1	2	4	4	50	24	28	20	0.17	0.83	0	NA	0
1	2	9	4	0	30	24	5	0.83	0.17	1	1	0
1	2	11	4	100	36	36	18	0.5	0.5	0	NA	0
1	2	20	4	0	42	35	30	0.29	0.71	0	NA	0
1	2	1	5	50	24	35	20	0.17	0.83	0	NA	0
1	2	6	5	0	30	23	18	0.4	0.6	1	1	0
1	2	14	5	100	36	39	33	0.08	0.92	0	NA	0
1	2	16	5	0	42	28	13	0.69	0.31	0	NA	0
1	3	2	1	0	24	20	10	0.58	0.42	1	1	0
1	3	10	1	100	30	38	20	0.33	0.67	0	NA	0
1	3	14	1	0	36	29	25	0.31	0.69	0	NA	0
1	3	17	1	50	42	43	42	0	1	0	NA	0
1	3	4	2	0	24	15	10	0.58	0.42	0	NA	0
1	3	6	2	100	30	30	25	0.17	0.83	0	NA	0
1	3	12	2	0	36	13	9	0.75	0.25	1	1	0
1	3	20	2	50	42	32	27	0.36	0.64	0	NA	0
1	3	5	3	0	24	20	15	0.38	0.62	1	0	5
1	3	8	3	100	30	28	24	0.2	0.8	0	NA	0
1	3	15	3	0	36	35	20	0.44	0.56	0	NA	0
1	3	19	3	50	42	43	42	0	1	0	NA	0
1	3	3	4	0	24	20	12	0.5	0.5	1	1	0
1	3	9	4	100	30	34	25	0.17	0.83	0	NA	0
1	3	11	4	0	36	25	18	0.5	0.5	0	NA	0
1	3	18	4	50	42	44	39	0.07	0.93	0	NA	0
1	3	1	5	0	24	20	10	0.58	0.42	1	0	10
1	3	7	5	100	30	30	20	0.33	0.67	0	NA	0
1	3	13	5	0	36	30	10	0.72	0.28	0	NA	0
1	3	16	5	50	42	42	34	0.19	0.81	0	NA	0
1	4	1	1	100	24	24	18	0.25	0.75	0	NA	0
1	4	8	1	0	30	18	8	0.73	0.27	1	1	0
1	4	11	1	50	36	46	26	0.28	0.72	0	NA	0
1	4	19	1	0	42	20	10	0.76	0.24	0	NA	0
1	4	4	2	100	24	25	21	0.12	0.88	0	NA	0
1	4	7	2	0	30	20	15	0.5	0.5	1	1	0
1	4	14	2	50	36	41	31	0.14	0.86	0	NA	0
1	4	20	2	0	42	28	25	0.4	0.6	0	NA	0
1	4	3	3	100	24	20	19	0.21	0.79	1	0	1
1	4	9	3	0	30	24	5	0.83	0.17	0	NA	0
1	4	13	3	50	36	40	36	0	1	0	NA	0
1	4	16	3	0	42	24	9	0.79	0.21	0	NA	0
1	4	5	4	100	24	25	23	0.04	0.96	0	NA	0
1	4	10	4	0	30	24	9	0.7	0.3	0	NA	0
1	4	15	4	50	36	52	20	0.44	0.56	0	NA	0
1	4	17	4	0	42	20	15	0.64	0.36	1	0	5
1	4	2	5	100	24	25	24	0	1	0	NA	0
1	4	6	5	0	30	22	15	0.5	0.5	1	1	0
1	4	12	5	50	36	42	30	0.17	0.83	0	NA	0
1	4	18	5	0	42	28	21	0.5	0.5	0	NA	0

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=no)	Detection (1=yes, 0=no)	Profit
1	5	5	1	0	30	28	22	0.27	0.73	0	NA	0
1	5	7	1	50	36	30	25	0.31	0.69	0	NA	0
1	5	15	1	0	42	30	25	0.4	0.6	0	NA	0
1	5	20	1	100	24	20	17	0.29	0.71	1	0	3
1	5	1	2	0	30	20	10	0.67	0.33	1	0	10
1	5	8	2	50	36	35	27	0.25	0.75	0	NA	0
1	5	13	2	0	42	25	12	0.71	0.29	0	NA	0
1	5	19	2	100	24	25	23	0.04	0.96	0	NA	0
1	5	2	3	0	30	23	12	0.6	0.4	0	NA	0
1	5	6	3	50	36	38	30	0.17	0.83	0	NA	0
1	5	12	3	0	42	17	15	0.64	0.36	1	1	0
1	5	17	3	100	24	25	23	0.04	0.96	0	NA	0
1	5	4	4	0	30	13	9	0.7	0.3	1	1	0
1	5	10	4	50	36	49	30	0.17	0.83	0	NA	0
1	5	11	4	0	42	22	21	0.5	0.5	0	NA	0
1	5	16	4	100	24	27	17	0.29	0.71	0	NA	0
1	5	3	5	0	30	21	15	0.5	0.5	1	1	0
1	5	9	5	50	36	40	30	0.17	0.83	0	NA	0
1	5	14	5	0	42	24	15	0.64	0.36	0	NA	0
1	5	18	5	100	24	25	21	0.12	0.88	0	NA	0
1	6	4	1	50	30	28	24	0.2	0.8	0	NA	0
1	6	9	1	0	36	19	10	0.72	0.28	0	NA	0
1	6	14	1	100	42	49	35	0.17	0.83	0	NA	0
1	6	18	1	0	24	18	12	0.5	0.5	1	1	0
1	6	5	2	50	30	32	28	0.07	0.93	0	NA	0
1	6	7	2	0	36	20	10	0.72	0.28	0	NA	0
1	6	15	2	100	42	43	41	0.02	0.98	0	NA	0
1	6	17	2	0	24	19	14	0.42	0.58	1	1	0
1	6	2	3	50	30	30	25	0.17	0.83	0	NA	0
1	6	6	3	0	36	24	18	0.5	0.5	0	NA	0
1	6	13	3	100	42	58	42	0	1	0	NA	0
1	6	16	3	0	24	17	10	0.58	0.42	1	0	7
1	6	1	4	50	30	26	25	0.17	0.83	0	NA	0
1	6	8	4	0	36	20	9	0.75	0.25	0	NA	0
1	6	12	4	100	42	43	41	0.02	0.98	0	NA	0
1	6	20	4	0	24	20	15	0.38	0.62	1	1	0
1	6	3	5	50	30	30	25	0.17	0.83	0	NA	0
1	6	10	5	0	36	18	7	0.81	0.19	0	NA	0
1	6	11	5	100	42	58	21	0.5	0.5	0	NA	0
1	6	19	5	0	24	13	3	0.88	0.12	1	1	0
1	7	4	1	0	30	14	9	0.7	0.3	1	1	0
1	7	7	1	100	36	30	25	0.31	0.69	0	NA	0
1	7	12	1	0	42	15	13	0.69	0.31	0	NA	0
1	7	16	1	50	24	24	19	0.21	0.79	0	NA	0
1	7	3	2	0	30	22	15	0.5	0.5	1	1	0
1	7	9	2	100	36	39	32	0.11	0.89	0	NA	0
1	7	15	2	0	42	25	19	0.55	0.45	0	NA	0
1	7	19	2	50	24	25	23	0.04	0.96	0	NA	0
1	7	5	3	0	30	25	20	0.33	0.67	0	NA	0
1	7	6	3	100	36	40	30	0.17	0.83	0	NA	0
1	7	13	3	0	42	19	10	0.76	0.24	1	1	0
1	7	18	3	50	24	25	22	0.08	0.92	0	NA	0
1	7	1	4	0	30	20	10	0.67	0.33	0	NA	0
1	7	8	4	100	36	35	27	0.25	0.75	0	NA	0
1	7	14	4	0	42	19	9	0.79	0.21	1	1	0
1	7	20	4	50	24	20	18	0.25	0.75	0	NA	0
1	7	2	5	0	30	20	14	0.53	0.47	1	0	6
1	7	10	5	100	36	42	30	0.17	0.83	0	NA	0
1	7	11	5	0	42	20	5	0.88	0.12	0	NA	0
1	7	17	5	50	24	20	17	0.29	0.71	0	NA	0
1	8	4	1	100	30	31	27	0.1	0.9	0	NA	0
1	8	6	1	0	36	22	18	0.5	0.5	0	NA	0
1	8	14	1	50	42	49	42	0	1	0	NA	0
1	8	17	1	0	24	14	8	0.67	0.33	1	1	0
1	8	5	2	100	30	32	28	0.07	0.93	0	NA	0
1	8	10	2	0	36	8	2	0.94	0.06	1	1	0
1	8	13	2	50	42	39	29	0.31	0.69	0	NA	0
1	8	19	2	0	24	13	4	0.83	0.17	0	NA	0
1	8	2	3	100	30	30	26	0.13	0.87	0	NA	0
1	8	7	3	0	36	18	12	0.67	0.33	1	1	0
1	8	12	3	50	42	43	42	0	1	0	NA	0
1	8	16	3	0	24	19	9	0.62	0.38	0	NA	0
1	8	1	4	100	30	23	21	0.3	0.7	0	NA	0
1	8	9	4	0	36	13	8	0.78	0.22	1	1	0
1	8	15	4	50	42	50	36	0.14	0.86	0	NA	0
1	8	20	4	0	24	18	15	0.37	0.63	0	NA	0
1	8	3	5	100	30	30	30	0	1	0	NA	0
1	8	8	5	0	36	19	9	0.75	0.25	0	NA	0
1	8	11	5	50	42	50	38	0.1	0.9	0	NA	0
1	8	18	5	0	24	18	15	0.38	0.62	1	0	3

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=not)	Detection (1=yes, 0=no)	Profit
1	9	5	1	0	36	30	22	0.39	0.61	0	NA	0
1	9	7	1	50	42	33	28	0.33	0.67	0	NA	0
1	9	11	1	0	24	15	12	0.5	0.5	1	0	3
1	9	18	1	100	30	30	28	0.07	0.93	0	NA	0
1	9	3	2	0	36	23	14	0.61	0.39	0	NA	0
1	9	10	2	50	42	50	30	0.29	0.71	0	NA	0
1	9	12	2	0	24	10	8	0.67	0.33	1	1	0
1	9	20	2	100	30	23	20	0.33	0.67	0	NA	0
1	9	4	3	0	36	16	11	0.69	0.31	1	1	0
1	9	8	3	50	42	40	32	0.24	0.76	0	NA	0
1	9	14	3	0	24	19	12	0.5	0.5	0	NA	0
1	9	19	3	100	30	31	29	0.03	0.97	0	NA	0
1	9	1	4	0	36	18	8	0.78	0.22	1	1	0
1	9	6	4	50	42	43	41	0.02	0.98	0	NA	0
1	9	15	4	0	24	20	14	0.42	0.58	0	NA	0
1	9	17	4	100	30	31	29	0.03	0.97	0	NA	0
1	9	2	5	0	36	21	14	0.61	0.39	0	NA	0
1	9	9	5	50	42	48	36	0.14	0.86	0	NA	0
1	9	13	5	0	24	20	10	0.58	0.42	1	1	0
1	9	16	5	100	30	35	12	0.6	0.4	0	NA	0
1	10	5	1	50	36	38	34	0.06	0.94	0	NA	0
1	10	8	1	0	42	19	11	0.74	0.26	0	NA	0
1	10	11	1	100	24	25	21	0.12	0.88	0	NA	0
1	10	16	1	0	30	15	8	0.73	0.27	1	0	7
1	10	4	2	50	36	30	28	0.22	0.78	0	NA	0
1	10	9	2	0	42	13	9	0.79	0.21	1	1	0
1	10	12	2	100	24	18	13	0.46	0.54	0	NA	0
1	10	20	2	0	30	20	18	0.4	0.6	0	NA	0
1	10	1	3	50	36	27	26	0.28	0.72	0	NA	0
1	10	10	3	0	42	28	14	0.67	0.33	0	NA	0
1	10	14	3	100	24	26	23	0.04	0.96	0	NA	0
1	10	18	3	0	30	18	15	0.5	0.5	1	0	3
1	10	2	4	50	36	36	30	0.17	0.83	0	NA	0
1	10	7	4	0	42	22	15	0.64	0.36	0	NA	0
1	10	13	4	100	24	24	12	0.5	0.5	0	NA	0
1	10	17	4	0	30	14	10	0.67	0.33	1	1	0
1	10	3	5	50	36	36	36	0	1	0	NA	0
1	10	6	5	0	42	18	13	0.69	0.31	0	NA	0
1	10	15	5	100	24	34	14	0.42	0.58	0	NA	0
1	10	19	5	0	30	10	4	0.87	0.13	1	1	0
1	11	4	1	0	36	15	11	0.69	0.31	1	1	0
1	11	10	1	100	42	55	35	0.17	0.83	0	NA	0
1	11	13	1	0	24	21	11	0.54	0.46	0	NA	0
1	11	17	1	50	30	20	18	0.4	0.6	0	NA	0
1	11	1	2	0	36	18	8	0.78	0.22	0	NA	0
1	11	9	2	100	42	48	36	0.14	0.86	0	NA	0
1	11	12	2	0	24	11	6	0.75	0.25	1	1	0
1	11	19	2	50	30	31	29	0.03	0.97	0	NA	0
1	11	2	3	0	36	20	14	0.61	0.39	0	NA	0
1	11	8	3	100	42	40	32	0.24	0.76	0	NA	0
1	11	11	3	0	24	19	12	0.5	0.5	1	1	0
1	11	16	3	50	30	26	20	0.33	0.67	0	NA	0
1	11	3	4	0	36	22	15	0.58	0.42	0	NA	0
1	11	6	4	100	42	44	38	0.1	0.9	0	NA	0
1	11	15	4	0	24	15	10	0.58	0.42	1	1	0
1	11	18	4	50	30	30	28	0.07	0.93	0	NA	0
1	11	5	5	0	36	29	24	0.33	0.67	0	NA	0
1	11	7	5	100	42	33	28	0.33	0.67	0	NA	0
1	11	14	5	0	24	14	9	0.63	0.37	1	0	5
1	11	20	5	50	30	23	20	0.33	0.67	0	NA	0
1	12	2	1	100	36	36	32	0.11	0.89	0	NA	0
1	12	9	1	0	42	13	9	0.79	0.21	1	0	4
1	12	12	1	50	24	19	14	0.42	0.58	0	NA	0
1	12	18	1	0	30	18	15	0.5	0.5	0	NA	0
1	12	3	2	100	36	36	36	0	1	0	NA	0
1	12	6	2	0	42	15	10	0.76	0.24	0	NA	0
1	12	14	2	50	24	27	22	0.08	0.92	0	NA	0
1	12	17	2	0	30	14	11	0.63	0.37	1	0	3
1	12	5	3	100	36	37	35	0.03	0.97	0	NA	0
1	12	10	3	0	42	15	4	0.9	0.1	0	NA	0
1	12	11	3	50	24	26	19	0.21	0.79	0	NA	0
1	12	19	3	0	30	10	6	0.8	0.2	1	1	0
1	12	4	4	100	36	58	36	0	1	0	NA	0
1	12	7	4	0	42	19	12	0.71	0.29	0	NA	0
1	12	15	4	50	24	29	19	0.21	0.79	0	NA	0
1	12	16	4	0	30	17	9	0.7	0.3	1	1	0
1	12	1	5	100	36	30	28	0.22	0.78	0	NA	0
1	12	8	5	0	42	17	11	0.74	0.26	1	0	6
1	12	13	5	50	24	25	15	0.37	0.63	0	NA	0
1	12	20	5	0	30	18	16	0.47	0.53	0	NA	0

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=not)	Detection (1=yes, 0=no)	Profit
1	13	2	1	0	42	18	13	0.69	0.31	1	0	5
1	13	6	1	50	24	26	22	0.08	0.92	0	NA	0
1	13	15	1	0	30	18	14	0.53	0.47	0	NA	0
1	13	20	1	100	36	25	22	0.39	0.61	0	NA	0
1	13	4	2	0	42	20	15	0.64	0.36	0	NA	0
1	13	8	2	50	24	23	18	0.25	0.75	0	NA	0
1	13	11	2	0	30	15	8	0.73	0.27	1	0	7
1	13	18	2	100	36	35	33	0.08	0.92	0	NA	0
1	13	1	3	0	42	16	6	0.86	0.14	0	NA	0
1	13	9	3	50	24	24	21	0.12	0.88	0	NA	0
1	13	12	3	0	30	13	10	0.67	0.33	1	0	3
1	13	19	3	100	36	37	35	0.03	0.97	0	NA	0
1	13	5	4	0	42	34	28	0.33	0.67	0	NA	0
1	13	7	4	50	24	20	15	0.37	0.63	0	NA	0
1	13	14	4	0	30	14	11	0.63	0.37	1	0	3
1	13	16	4	100	36	58	20	0.44	0.56	0	NA	0
1	13	3	5	0	42	20	17	0.6	0.4	0	NA	0
1	13	10	5	50	24	28	12	0.5	0.5	0	NA	0
1	13	13	5	0	30	19	9	0.7	0.3	1	1	0
1	13	17	5	100	36	37	35	0.03	0.97	0	NA	0
1	14	5	1	50	42	43	41	0.02	0.98	0	NA	0
1	14	7	1	0	24	11	5	0.79	0.21	1	1	0
1	14	12	1	100	30	31	29	0.03	0.97	0	NA	0
1	14	16	1	0	36	17	10	0.72	0.28	0	NA	0
1	14	1	2	50	42	31	30	0.29	0.71	0	NA	0
1	14	6	2	0	24	8	6	0.75	0.25	1	1	0
1	14	14	2	100	30	34	27	0.1	0.9	0	NA	0
1	14	17	2	0	36	14	11	0.69	0.31	0	NA	0
1	14	4	3	50	42	44	40	0.05	0.95	0	NA	0
1	14	8	3	0	24	11	6	0.75	0.25	1	0	5
1	14	15	3	100	30	41	20	0.33	0.67	0	NA	0
1	14	18	3	0	36	18	15	0.58	0.42	0	NA	0
1	14	2	4	50	42	42	35	0.17	0.83	0	NA	0
1	14	10	4	0	24	9	7	0.71	0.29	1	1	0
1	14	11	4	100	30	37	23	0.23	0.77	0	NA	0
1	14	19	4	0	36	12	7	0.81	0.19	0	NA	0
1	14	3	5	50	42	42	42	0	1	0	NA	0
1	14	9	5	0	24	9	5	0.79	0.21	1	1	0
1	14	13	5	100	30	58	30	0	1	0	NA	0
1	14	20	5	0	36	20	18	0.5	0.5	0	NA	0
1	15	4	1	0	42	15	9	0.79	0.21	1	1	0
1	15	8	1	100	24	23	18	0.25	0.75	0	NA	0
1	15	14	1	0	30	19	12	0.6	0.4	0	NA	0
1	15	17	1	50	36	37	35	0.03	0.97	0	NA	0
1	15	3	2	0	42	17	14	0.67	0.33	0	NA	0
1	15	7	2	100	24	30	20	0.17	0.83	0	NA	0
1	15	12	2	0	30	14	10	0.67	0.33	1	1	0
1	15	19	2	50	36	37	35	0.03	0.97	0	NA	0
1	15	1	3	0	42	14	4	0.9	0.1	1	0	10
1	15	6	3	100	24	26	22	0.08	0.92	0	NA	0
1	15	15	3	0	30	15	10	0.67	0.33	0	NA	0
1	15	20	3	50	36	24	23	0.36	0.64	0	NA	0
1	15	2	4	0	42	18	13	0.69	0.31	1	1	0
1	15	10	4	100	24	19	17	0.29	0.71	0	NA	0
1	15	13	4	0	30	19	9	0.7	0.3	0	NA	0
1	15	16	4	50	36	58	20	0.44	0.56	0	NA	0
1	15	5	5	0	42	33	28	0.33	0.67	0	NA	0
1	15	9	5	100	24	28	20	0.17	0.83	0	NA	0
1	15	11	5	0	30	20	15	0.5	0.5	1	1	0
1	15	18	5	50	36	35	33	0.08	0.92	0	NA	0
1	16	1	1	100	42	50	24	0.43	0.57	0	NA	0
1	16	9	1	0	24	9	5	0.79	0.21	1	0	4
1	16	11	1	50	30	30	25	0.17	0.83	0	NA	0
1	16	20	1	0	36	17	15	0.58	0.42	0	NA	0
1	16	4	2	100	42	44	42	0	1	0	NA	0
1	16	6	2	0	24	9	6	0.75	0.25	1	1	0
1	16	14	2	50	30	34	18	0.4	0.6	0	NA	0
1	16	18	2	0	36	15	12	0.67	0.33	0	NA	0
1	16	2	3	100	42	41	33	0.21	0.79	0	NA	0
1	16	10	3	0	24	13	10	0.58	0.42	1	1	0
1	16	15	3	50	30	40	20	0.33	0.67	0	NA	0
1	16	16	3	0	36	14	8	0.78	0.22	0	NA	0
1	16	5	4	100	42	43	41	0.02	0.98	0	NA	0
1	16	8	4	0	24	10	6	0.75	0.25	1	1	0
1	16	13	4	50	30	58	30	0	1	0	NA	0
1	16	19	4	0	36	10	7	0.81	0.19	0	NA	0
1	16	3	5	100	42	42	42	0	1	0	NA	0
1	16	7	5	0	24	11	5	0.79	0.21	0	NA	0
1	16	12	5	50	30	34	26	0.13	0.87	0	NA	0
1	16	17	5	0	36	9	7	0.81	0.19	1	1	0

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=not)	Detection (1=yes, 0=no)	Profit
2	1	2	1	0	24	15	5	0.79	0.21	1	1	0
2	1	10	1	50	30	35	25	0.17	0.83	0	NA	0
2	1	12	1	0	36	30	10	0.72	0.28	0	NA	0
2	1	19	1	100	42	44	40	0.05	0.95	0	NA	0
2	1	1	2	0	24	20	14	0.42	0.58	1	0	6
2	1	7	2	50	30	45	25	0.17	0.83	0	NA	0
2	1	14	2	0	36	26	17	0.53	0.47	0	NA	0
2	1	18	2	100	42	42	25	0.4	0.6	0	NA	0
2	1	5	3	0	24	29	17	0.29	0.71	1	0	12
2	1	8	3	50	30	34	26	0.13	0.87	0	NA	0
2	1	15	3	0	36	31	21	0.42	0.58	0	NA	0
2	1	20	3	100	42	47	37	0.12	0.88	0	NA	0
2	1	4	4	0	24	26	12	0.5	0.5	1	0	14
2	1	9	4	50	30	34	29	0.03	0.97	0	NA	0
2	1	11	4	0	36	31	21	0.42	0.58	0	NA	0
2	1	16	4	100	42	42	32	0.24	0.76	0	NA	0
2	1	3	5	0	24	41	24	0	1	0	NA	0
2	1	6	5	50	30	30	24	0.2	0.8	0	NA	0
2	1	13	5	0	36	19	18	0.5	0.5	1	1	0
2	1	17	5	100	42	41	21	0.5	0.5	0	NA	0
2	2	3	1	50	24	24	12	0.5	0.5	0	NA	0
2	2	7	1	0	30	35	30	0	1	0	NA	0
2	2	15	1	100	36	30	28	0.22	0.78	0	NA	0
2	2	17	1	0	42	19	9	0.79	0.21	1	0	10
2	2	2	2	50	24	36	17	0.29	0.71	0	NA	0
2	2	10	2	0	30	25	15	0.5	0.5	1	0	10
2	2	13	2	100	36	54	18	0.5	0.5	0	NA	0
2	2	19	2	0	42	30	20	0.52	0.48	0	NA	0
2	2	5	3	50	24	29	19	0.21	0.79	0	NA	0
2	2	8	3	0	30	26	20	0.33	0.67	1	0	6
2	2	12	3	100	36	36	36	0	1	0	NA	0
2	2	18	3	0	42	26	21	0.5	0.5	0	NA	0
2	2	4	4	50	24	28	20	0.17	0.83	0	NA	0
2	2	9	4	0	30	22	15	0.5	0.5	1	0	7
2	2	11	4	100	36	38	34	0.06	0.94	0	NA	0
2	2	20	4	0	42	38	28	0.33	0.67	0	NA	0
2	2	1	5	50	24	30	20	0.17	0.83	0	NA	0
2	2	6	5	0	30	25	15	0.5	0.5	1	0	10
2	2	14	5	100	36	34	28	0.22	0.78	0	NA	0
2	2	16	5	0	42	41	32	0.24	0.76	0	NA	0
2	3	2	1	0	24	22	10	0.58	0.42	0	NA	0
2	3	10	1	100	30	32	28	0.07	0.93	0	NA	0
2	3	14	1	0	36	14	4	0.89	0.11	1	0	10
2	3	17	1	50	42	41	21	0.5	0.5	0	NA	0
2	3	4	2	0	24	22	12	0.5	0.5	0	NA	0
2	3	6	2	100	30	32	24	0.2	0.8	0	NA	0
2	3	12	2	0	36	19	9	0.75	0.25	1	1	0
2	3	20	2	50	42	47	37	0.12	0.88	0	NA	0
2	3	5	3	0	24	24	17	0.29	0.71	0	NA	0
2	3	8	3	100	30	32	28	0.07	0.93	0	NA	0
2	3	15	3	0	36	20	10	0.72	0.28	1	0	10
2	3	19	3	50	42	44	36	0.14	0.86	0	NA	0
2	3	3	4	0	24	12	6	0.75	0.25	1	0	6
2	3	9	4	100	30	26	24	0.2	0.8	0	NA	0
2	3	11	4	0	36	20	15	0.58	0.42	0	NA	0
2	3	18	4	50	42	41	21	0.5	0.5	0	NA	0
2	3	1	5	0	24	20	14	0.42	0.58	1	1	0
2	3	7	5	100	30	30	25	0.17	0.83	0	NA	0
2	3	13	5	0	36	21	20	0.44	0.56	0	NA	0
2	3	16	5	50	42	40	30	0.29	0.71	0	NA	0
2	4	1	1	100	24	40	21	0.12	0.88	0	NA	0
2	4	8	1	0	30	26	20	0.33	0.67	0	NA	0
2	4	11	1	50	36	37	35	0.03	0.97	0	NA	0
2	4	19	1	0	42	20	17	0.6	0.4	1	1	0
2	4	4	2	100	24	28	18	0.25	0.75	0	NA	0
2	4	7	2	0	30	25	18	0.4	0.6	1	1	0
2	4	14	2	50	36	25	23	0.36	0.64	0	NA	0
2	4	20	2	0	42	31	21	0.5	0.5	0	NA	0
2	4	3	3	100	24	25	23	0.04	0.96	0	NA	0
2	4	9	3	0	30	19	16	0.47	0.53	1	0	3
2	4	13	3	50	36	37	36	0	1	0	NA	0
2	4	16	3	0	42	20	10	0.76	0.24	0	NA	0
2	4	5	4	100	24	23	21	0.13	0.87	1	0	2
2	4	10	4	0	30	27	15	0.5	0.5	0	NA	0
2	4	15	4	50	36	30	25	0.31	0.69	0	NA	0
2	4	17	4	0	42	24	9	0.79	0.21	0	NA	0
2	4	2	5	100	24	26	16	0.33	0.67	0	NA	0
2	4	6	5	0	30	27	15	0.5	0.5	0	NA	0
2	4	12	5	50	36	36	36	0	1	0	NA	0
2	4	18	5	0	42	20	13	0.69	0.31	1	0	7

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=not)	Detection (1=yes, 0=no)	Profit
2	5	5	1	0	30	22	17	0.43	0.57	0	NA	0
2	5	7	1	50	36	37	27	0.25	0.75	0	NA	0
2	5	15	1	0	42	20	15	0.64	0.36	1	0	5
2	5	20	1	100	24	29	19	0.21	0.79	0	NA	0
2	5	1	2	0	30	30	20	0.33	0.67	0	NA	0
2	5	8	2	50	36	42	30	0.17	0.83	0	NA	0
2	5	13	2	0	42	10	9	0.79	0.21	1	1	0
2	5	19	2	100	24	30	16	0.33	0.67	0	NA	0
2	5	2	3	0	30	14	9	0.7	0.3	1	1	0
2	5	6	3	50	36	32	27	0.25	0.75	0	NA	0
2	5	12	3	0	42	23	11	0.74	0.26	0	NA	0
2	5	17	3	100	24	20	10	0.58	0.42	0	NA	0
2	5	4	4	0	30	19	10	0.67	0.33	0	NA	0
2	5	10	4	50	36	35	30	0.17	0.83	0	NA	0
2	5	11	4	0	42	12	2	0.95	0.05	1	1	0
2	5	16	4	100	24	31	17	0.29	0.71	0	NA	0
2	5	3	5	0	30	12	6	0.8	0.2	1	1	0
2	5	9	5	50	36	28	26	0.28	0.72	0	NA	0
2	5	14	5	0	42	15	7	0.83	0.17	0	NA	0
2	5	18	5	100	24	22	12	0.5	0.5	0	NA	0
2	6	4	1	50	30	30	24	0.2	0.8	0	NA	0
2	6	9	1	0	36	19	14	0.61	0.39	1	0	5
2	6	14	1	100	42	35	33	0.21	0.79	0	NA	0
2	6	18	1	0	24	20	8	0.67	0.33	0	NA	0
2	6	5	2	50	30	31	29	0.03	0.97	0	NA	0
2	6	7	2	0	36	25	15	0.58	0.42	0	NA	0
2	6	15	2	100	42	46	36	0.14	0.86	0	NA	0
2	6	17	2	0	24	19	5	0.79	0.21	1	0	14
2	6	2	3	50	30	31	15	0.5	0.5	0	NA	0
2	6	6	3	0	36	24	18	0.5	0.5	0	NA	0
2	6	13	3	100	42	43	42	0	1	0	NA	0
2	6	16	3	0	24	15	10	0.58	0.42	1	1	0
2	6	1	4	50	30	50	20	0.33	0.67	0	NA	0
2	6	8	4	0	36	27	24	0.33	0.67	0	NA	0
2	6	12	4	100	42	42	42	0	1	0	NA	0
2	6	20	4	0	24	17	12	0.5	0.5	1	0	5
2	6	3	5	50	30	24	21	0.3	0.7	0	NA	0
2	6	10	5	0	36	27	17	0.53	0.47	0	NA	0
2	6	11	5	100	42	43	41	0.02	0.98	0	NA	0
2	6	19	5	0	24	16	6	0.75	0.25	1	1	0
2	7	4	1	0	30	17	10	0.67	0.33	1	0	7
2	7	7	1	100	36	36	33	0.08	0.92	0	NA	0
2	7	12	1	0	42	21	11	0.74	0.26	0	NA	0
2	7	16	1	50	24	28	20	0.17	0.83	0	NA	0
2	7	3	2	0	30	18	12	0.6	0.4	1	0	6
2	7	9	2	100	36	58	36	0	1	0	NA	0
2	7	15	2	0	42	23	10	0.76	0.24	0	NA	0
2	7	19	2	50	24	28	18	0.25	0.75	0	NA	0
2	7	5	3	0	30	20	17	0.43	0.57	0	NA	0
2	7	6	3	100	36	30	24	0.33	0.67	0	NA	0
2	7	13	3	0	42	15	7	0.83	0.17	1	1	0
2	7	18	3	50	24	23	18	0.25	0.75	0	NA	0
2	7	1	4	0	30	20	14	0.53	0.47	0	NA	0
2	7	8	4	100	36	38	31	0.14	0.86	0	NA	0
2	7	14	4	0	42	13	9	0.79	0.21	1	0	4
2	7	20	4	50	24	58	24	0	1	0	NA	0
2	7	2	5	0	30	22	15	0.5	0.5	0	NA	0
2	7	10	5	100	36	35	34	0.06	0.94	0	NA	0
2	7	11	5	0	42	15	9	0.79	0.21	1	1	0
2	7	17	5	50	24	24	12	0.5	0.5	0	NA	0
2	8	4	1	100	30	30	24	0.2	0.8	0	NA	0
2	8	6	1	0	36	21	18	0.5	0.5	0	NA	0
2	8	14	1	50	42	28	25	0.4	0.6	0	NA	0
2	8	17	1	0	24	19	5	0.79	0.21	1	0	14
2	8	5	2	100	30	29	27	0.1	0.9	0	NA	0
2	8	10	2	0	36	24	17	0.53	0.47	0	NA	0
2	8	13	2	50	42	43	42	0	1	0	NA	0
2	8	19	2	0	24	16	6	0.75	0.25	1	1	0
2	8	2	3	100	30	22	15	0.5	0.5	0	NA	0
2	8	7	3	0	36	20	9	0.75	0.25	0	NA	0
2	8	12	3	50	42	42	42	0	1	0	NA	0
2	8	16	3	0	24	15	10	0.58	0.42	1	1	0
2	8	1	4	100	30	31	29	0.03	0.97	0	NA	0
2	8	9	4	0	36	19	14	0.61	0.39	1	0	5
2	8	15	4	50	42	42	42	0	1	0	NA	0
2	8	20	4	0	24	20	15	0.37	0.63	0	NA	0
2	8	3	5	100	30	21	20	0.33	0.67	0	NA	0
2	8	8	5	0	36	23	20	0.44	0.56	0	NA	0
2	8	11	5	50	42	58	42	0	1	0	NA	0
2	8	18	5	0	24	20	8	0.67	0.33	1	0	12

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=not)	Detection (1=yes, 0=no)	Profit
2	9	5	1	0	36	21	18	0.5	0.5	0	NA	0
2	9	7	1	50	42	42	42	0	1	0	NA	0
2	9	11	1	0	24	16	6	0.75	0.25	1	1	0
2	9	18	1	100	30	27	24	0.2	0.8	0	NA	0
2	9	3	2	0	36	18	12	0.67	0.33	0	NA	0
2	9	10	2	50	42	42	40	0.05	0.95	0	NA	0
2	9	12	2	0	24	16	6	0.75	0.25	1	1	0
2	9	20	2	100	30	58	30	0	1	0	NA	0
2	9	4	3	0	36	19	12	0.67	0.33	0	NA	0
2	9	8	3	50	42	40	38	0.1	0.9	0	NA	0
2	9	14	3	0	24	10	1	0.96	0.04	1	1	0
2	9	19	3	100	30	31	28	0.07	0.93	0	NA	0
2	9	1	4	0	36	20	14	0.61	0.39	0	NA	0
2	9	6	4	50	42	36	32	0.24	0.76	0	NA	0
2	9	15	4	0	24	15	5	0.79	0.21	1	0	10
2	9	17	4	100	30	30	9	0.7	0.3	0	NA	0
2	9	2	5	0	36	20	14	0.61	0.39	0	NA	0
2	9	9	5	50	42	58	42	0	1	0	NA	0
2	9	13	5	0	24	15	7	0.71	0.29	1	0	8
2	9	16	5	100	30	36	24	0.2	0.8	0	NA	0
2	10	5	1	50	36	35	33	0.08	0.92	0	NA	0
2	10	8	1	0	42	25	21	0.5	0.5	0	NA	0
2	10	11	1	100	24	25	23	0.04	0.96	0	NA	0
2	10	16	1	0	30	20	13	0.57	0.43	1	0	7
2	10	4	2	50	36	36	27	0.25	0.75	0	NA	0
2	10	9	2	0	42	23	18	0.57	0.43	0	NA	0
2	10	12	2	100	24	24	24	0	1	0	NA	0
2	10	20	2	0	30	20	15	0.5	0.5	1	1	0
2	10	1	3	50	36	37	35	0.03	0.97	0	NA	0
2	10	10	3	0	42	20	16	0.62	0.38	0	NA	0
2	10	14	3	100	24	16	15	0.38	0.62	1	0	1
2	10	18	3	0	30	20	10	0.67	0.33	0	NA	0
2	10	2	4	50	36	41	18	0.5	0.5	0	NA	0
2	10	7	4	0	42	16	6	0.86	0.14	1	1	0
2	10	13	4	100	24	25	23	0.04	0.96	0	NA	0
2	10	17	4	0	30	19	9	0.7	0.3	0	NA	0
2	10	3	5	50	36	37	35	0.03	0.97	0	NA	0
2	10	6	5	0	42	20	17	0.6	0.4	1	0	3
2	10	15	5	100	24	25	13	0.46	0.54	0	NA	0
2	10	19	5	0	30	25	15	0.5	0.5	0	NA	0
2	11	4	1	0	36	12	5	0.86	0.14	1	0	7
2	11	10	1	100	42	58	40	0.05	0.95	0	NA	0
2	11	13	1	0	24	15	7	0.71	0.29	0	NA	0
2	11	17	1	50	30	30	15	0.5	0.5	0	NA	0
2	11	1	2	0	36	17	14	0.61	0.39	0	NA	0
2	11	9	2	100	42	58	42	0	1	0	NA	0
2	11	12	2	0	24	16	6	0.75	0.25	1	1	0
2	11	19	2	50	30	30	28	0.07	0.93	0	NA	0
2	11	2	3	0	36	16	12	0.67	0.33	0	NA	0
2	11	8	3	100	42	43	40	0.05	0.95	0	NA	0
2	11	11	3	0	24	15	5	0.79	0.21	1	1	0
2	11	16	3	50	30	39	21	0.3	0.7	0	NA	0
2	11	3	4	0	36	12	6	0.83	0.17	1	0	6
2	11	6	4	100	42	40	36	0.14	0.86	0	NA	0
2	11	15	4	0	24	13	3	0.87	0.13	0	NA	0
2	11	18	4	50	30	30	15	0.5	0.5	0	NA	0
2	11	5	5	0	36	19	15	0.58	0.42	0	NA	0
2	11	7	5	100	42	42	42	0	1	0	NA	0
2	11	14	5	0	24	14	12	0.5	0.5	1	0	2
2	11	20	5	50	30	58	30	0	1	0	NA	0
2	12	2	1	100	36	50	24	0.33	0.67	0	NA	0
2	12	9	1	0	42	18	14	0.67	0.33	0	NA	0
2	12	12	1	50	24	24	24	0	1	0	NA	0
2	12	18	1	0	30	15	10	0.67	0.33	1	1	0
2	12	3	2	100	36	37	35	0.03	0.97	0	NA	0
2	12	6	2	0	42	24	17	0.6	0.4	0	NA	0
2	12	14	2	50	24	17	16	0.33	0.67	1	1	-15
2	12	17	2	0	30	19	9	0.7	0.3	0	NA	0
2	12	5	3	100	36	41	31	0.14	0.86	0	NA	0
2	12	10	3	0	42	18	13	0.69	0.31	1	1	0
2	12	11	3	50	24	25	23	0.04	0.96	0	NA	0
2	12	19	3	0	30	20	15	0.5	0.5	0	NA	0
2	12	4	4	100	36	35	29	0.19	0.81	0	NA	0
2	12	7	4	0	42	16	4	0.9	0.1	1	1	0
2	12	15	4	50	24	42	24	0	1	0	NA	0
2	12	16	4	0	30	20	13	0.57	0.43	0	NA	0
2	12	1	5	100	36	37	35	0.03	0.97	0	NA	0
2	12	8	5	0	42	21	18	0.57	0.43	0	NA	0
2	12	13	5	50	24	25	23	0.04	0.96	0	NA	0
2	12	20	5	0	30	20	15	0.5	0.5	1	0	5

Session	Period	Producer's No.	Group ID	Initial cash balance	Proper cost	Bid	Spending	Prob. of detection	Quality	Winner (1=yes, 0=not)	Detection (1=yes, 0=no)	Profit
2	13	2	1	0	42	32	17	0.6	0.4	0	NA	0
2	13	6	1	50	24	24	18	0.25	0.75	0	NA	0
2	13	15	1	0	30	20	5	0.83	0.17	1	0	15
2	13	20	1	100	36	58	36	0	1	0	NA	0
2	13	4	2	0	42	14	7	0.83	0.17	1	1	0
2	13	8	2	50	24	24	20	0.17	0.83	0	NA	0
2	13	11	2	0	30	16	12	0.6	0.4	0	NA	0
2	13	18	2	100	36	27	25	0.31	0.69	0	NA	0
2	13	1	3	0	42	15	12	0.71	0.29	1	1	0
2	13	9	3	50	24	58	24	0	1	0	NA	0
2	13	12	3	0	30	18	8	0.73	0.27	0	NA	0
2	13	19	3	100	36	38	34	0.06	0.94	0	NA	0
2	13	5	4	0	42	19	14	0.67	0.33	0	NA	0
2	13	7	4	50	24	24	24	0	1	0	NA	0
2	13	14	4	0	30	18	4	0.87	0.13	1	1	0
2	13	16	4	100	36	45	27	0.25	0.75	0	NA	0
2	13	3	5	0	42	15	7	0.83	0.17	0	NA	0
2	13	10	5	50	24	22	20	0.17	0.83	0	NA	0
2	13	13	5	0	30	10	5	0.83	0.17	1	1	0
2	13	17	5	100	36	40	15	0.58	0.42	0	NA	0
2	14	5	1	50	42	58	26	0.38	0.62	0	NA	0
2	14	7	1	0	24	19	9	0.63	0.37	1	0	10
2	14	12	1	100	30	30	30	0	1	0	NA	0
2	14	16	1	0	36	20	16	0.56	0.44	0	NA	0
2	14	1	2	50	42	43	41	0.02	0.98	0	NA	0
2	14	6	2	0	24	18	8	0.67	0.33	1	1	0
2	14	14	2	100	30	24	21	0.3	0.7	0	NA	0
2	14	17	2	0	36	18	6	0.83	0.17	0	NA	0
2	14	4	3	50	42	40	31	0.26	0.74	0	NA	0
2	14	8	3	0	24	19	15	0.37	0.63	0	NA	0
2	14	15	3	100	30	32	22	0.27	0.73	0	NA	0
2	14	18	3	0	36	19	14	0.61	0.39	1	1	0
2	14	2	4	50	42	31	26	0.38	0.62	0	NA	0
2	14	10	4	0	24	18	12	0.5	0.5	1	1	0
2	14	11	4	100	30	58	30	0	1	0	NA	0
2	14	19	4	0	36	18	11	0.69	0.31	0	NA	0
2	14	3	5	50	42	43	41	0.02	0.98	0	NA	0
2	14	9	5	0	24	11	8	0.67	0.33	1	1	0
2	14	13	5	100	30	31	29	0.03	0.97	0	NA	0
2	14	20	5	0	36	23	18	0.5	0.5	0	NA	0
2	15	4	1	0	42	14	7	0.83	0.17	1	0	7
2	15	8	1	100	24	25	20	0.17	0.83	0	NA	0
2	15	14	1	0	30	20	17	0.43	0.57	0	NA	0
2	15	17	1	50	36	40	15	0.58	0.42	0	NA	0
2	15	3	2	0	42	12	7	0.83	0.17	1	1	0
2	15	7	2	100	24	24	24	0	1	0	NA	0
2	15	12	2	0	30	18	8	0.73	0.27	0	NA	0
2	15	19	2	50	36	37	35	0.03	0.97	0	NA	0
2	15	1	3	0	42	15	12	0.71	0.29	0	NA	0
2	15	6	3	100	24	22	18	0.25	0.75	0	NA	0
2	15	15	3	0	30	10	1	0.97	0.03	1	1	0
2	15	20	3	50	36	58	36	0	1	0	NA	0
2	15	2	4	0	42	20	16	0.62	0.38	0	NA	0
2	15	10	4	100	24	22	20	0.17	0.83	0	NA	0
2	15	13	4	0	30	10	5	0.83	0.17	1	1	0
2	15	16	4	50	36	45	27	0.25	0.75	0	NA	0
2	15	5	5	0	42	16	8	0.81	0.19	0	NA	0
2	15	9	5	100	24	58	24	0	1	0	NA	0
2	15	11	5	0	30	13	12	0.6	0.4	1	1	0
2	15	18	5	50	36	30	27	0.25	0.75	0	NA	0
2	16	1	1	100	42	43	41	0.02	0.98	0	NA	0
2	16	9	1	0	24	11	8	0.67	0.33	1	1	0
2	16	11	1	50	30	40	20	0.33	0.67	0	NA	0
2	16	20	1	0	36	23	18	0.5	0.5	0	NA	0
2	16	4	2	100	42	40	31	0.26	0.74	0	NA	0
2	16	6	2	0	24	16	9	0.63	0.37	1	0	7
2	16	14	2	50	30	25	23	0.23	0.77	0	NA	0
2	16	18	2	0	36	20	10	0.72	0.28	0	NA	0
2	16	2	3	100	42	36	29	0.31	0.69	0	NA	0
2	16	10	3	0	24	18	13	0.46	0.54	0	NA	0
2	16	15	3	50	30	58	8	0.73	0.27	0	NA	0
2	16	16	3	0	36	17	14	0.61	0.39	1	1	0
2	16	5	4	100	42	58	26	0.38	0.62	0	NA	0
2	16	8	4	0	24	19	16	0.33	0.67	0	NA	0
2	16	13	4	50	30	31	29	0.03	0.97	0	NA	0
2	16	19	4	0	36	16	12	0.67	0.33	1	0	4
2	16	3	5	100	42	43	42	0	1	0	NA	0
2	16	7	5	0	24	19	9	0.62	0.38	0	NA	0
2	16	12	5	50	30	30	30	0	1	0	NA	0
2	16	17	5	0	36	8	6	0.83	0.17	1	1	0