

**ORAL VERSUS VAGINAL MISOPROSTOL FOR INDUCTION OF  
LABOR**

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE RULES AND  
REGULATIONS FOR THE MD BRANCH II (OBSTETRICS AND GYNAECOLOGY)  
DEGREE EXAMINATION OF THE TAMIL NADU DR. M.G.R MEDICAL  
UNIVERSITY TO BE HELD IN APRIL 2013

## **CERTIFICATE**

This is to certify that the dissertation entitled '**Oral versus vaginal misoprostol for induction of labor**' is the original work of Dr. Hilda Yenuberi done under my guidance towards the MD Branch II (Obstetrics and Gynecology) Degree Examination of the Tamil Nadu Dr.M.G.R Medical University, Chennai to be held in April 2013.

Signature

Guide:

Dr.Jiji E. Matthews  
Professor and Head of Unit  
Obstetrics and Gynecology Unit V  
Christian Medical College, Vellore  
Vellore – 632004

Co-Guides:

Dr. Ajit Sebastian  
Dr. Anuja Abraham  
Dr. Santosh Benjamin  
Dr. Vaibhav Londhe

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Signature:

Head of Department

Dr. Abraham Peedicayil

Professor and Head of Department

Obstetrics and Gynecology

Christian Medical College, Vellore

Vellore – 632004.

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## TABLE OF CONTENTS

<b>S.NO</b>	<b>CONTENT</b>	<b>Page No.</b>
1.	INTRODUCTION	3
2.	AIMS AND OBJECTIVES	4
3.	REVIEW OF LITERATURE	7
4.	MATERIALS AND METHODOLOGY	42
5.	RESULTS	47
6.	DISSCUSION	72
7.	LIMITATIONS	78
8.	CONCLUSIONS	79
9.	BIBLIOGRAPHY	80
10.	ANNEXURE	86

## **ABSTRACT**

TITLE OF THE ABSTRACT : ORAL VERSUS VAGINAL MISOPROSTOL FOR INDUCTION OF LABOR

DEPARTMENT : OBSTETRICS AND GYNECOLOGY

NAME OF THE CANDIDATE : DR. HILDA YENUBERI

DEGREE AND SUBJECT : M.D. OBSTETRICS AND GYNECOLOGY

NAME OF THE GUIDE : DR. JJI ELIZABETH MATTHEW

OBJECTIVES: The aim of this randomized controlled trial is to compare the safety and efficacy of titrated oral misoprostol with vaginal misoprostol for labor induction.

### **METHODS:**

778 patients at term meeting inclusion criteria for induction of labor were randomized by computer generated block randomization sequence. They were allocated into two groups to receive oral drug and vaginal placebo or vaginal drug and oral placebo given every 4 hourly until the patient entered active labor or the bishop score of the cervix was more than 6. The dosage of the oral drug was 50 mcg of misoprostol followed by 2 doses of 100 mcg each and that of the vaginal drug was 25 mcg in all three doses. The results were analyzed using SPSS version 17 software.

### **RESULTS:**

389 women were equally randomized to each arm. Vaginal delivery in 24 hours from induction was achieved in 67% and 66.8% of the vaginal and oral misoprostol group respectively. The rate of cesarean section rate, incidence of uterine hyperstimulation and meconium staining were similar in both the groups. The need for oxytocin augmentation was less in the oral misoprostol group (80.3% versus 73.4%,  $p=0.02$ ). The incidence of maternal or neonatal outcomes was similar. Our study found that oral misoprostol is as safe and effective as vaginal misoprostol for cervical ripening.

Key Words :

Oral misoprostol

Vaginal misoprostol

Cervical ripening

Induction of labor

## **INTRODUCTION**

Induction of labor is the non-spontaneous initiation of uterine contractions that result in progressive cervical effacement and dilatation with descent of the fetal presenting part. It is considered beneficial in many circumstances. Cervical status is an important clinical factor which determines the outcome of the induction process. More than 15% of all gravid women require aid in cervical ripening. The main problems during induction of labor are inability to achieve effective contractions or the production of excessively strong uterine contractions.

Misoprostol a synthetic analogue of Prostaglandin E1 has been proposed as an alternative to Dinoprostone- agent of choice, for pre-induction cervical ripening. The recommended dose for vaginal route is 25 mcg every four hours. Excessive uterine contractions leading to fetal distress with these doses are still a cause of concern. Oral dose is known to be safer than vaginal route because of its pharmacokinetics(1).

Oral administration is easier and has greater acceptability among women. Absorption by oral route is rapid and peak serum concentration is reached in 34 minutes with a half-life of 20-40 minutes. Peak serum concentration for vaginal route is 60-80 minutes and effect lasts for more than 4 hours. The aim of this randomized controlled trial is to compare the efficacy of the titrated oral with vaginal misoprostol for labor induction.



## **AIM**

The aim of this randomized controlled trial is to compare the safety and efficacy of titrated oral misoprostol with vaginal misoprostol for labor induction.

## **PRIMARY OUTCOME**

1. Vaginal delivery not achieved in 24 hours
2. Uterine hyperstimulation with fetal heart rate changes
3. Cesarean section

## **SECONDARY OUTCOMES**

Secondary outcomes relate to measures of effectiveness and complications.

### **Measures of effectiveness:**

1. Cervix unfavorable/ unchanged after 12 hours
2. Need for oxytocin augmentation

### **Measures of Complications:**

1. Serious neonatal morbidity or perinatal death (e.g., seizures, birth asphyxia, neonatal encephalopathy)
2. Serious maternal morbidity or death (e.g., uterine rupture, admission to intensive care unit, septicemia, traumatic postpartum hemorrhage)
3. Meconium stained liquor
4. Apgar scores less than seven at five minutes
5. Neonatal intensive care unit admission
6. Maternal nausea
7. Maternal vomiting
8. Maternal diarrhea
9. Other maternal side-effects
10. Postpartum hemorrhage >500 ml blood loss

## **REVIEW OF LITERATURE**

Induction of labor is defined as an intervention designed to artificially initiate uterine contractions leading to progressive dilatation and effacement of the cervix and birth of the baby(2). Labor induction is indicated when the devised benefits are agreed to be greater for both the mother and the fetus than in continuing the pregnancy.

### **INCIDENCE**

As quoted by the National Center for Health Statistics there has been an increase in the induction of labor in term pregnancies from 9.9 % in 1990 to 24.3% in 2008 in the United States(3). According to the NHS maternity statistics in United Kingdom the rate of induction of labor was 21.3% in 2010-11 compared to 20.8% in 2009-10(4). More than 15 % of all gravid women require aid in cervical ripening. As per WHO global survey 9.6% of deliveries are after labor induction and the rates of induction are lower in African countries compared to Asian and Latin American countries ( Sri Lanka 35.5% )(5).

## INDICATONS FOR INDUCTION OF LABOUR

Labor induction has a major health impact on the mother and her baby and hence the decision should be clear and clinically justified. Induction of labor is considered beneficial in many circumstances.

The various indications are listed below:

### Maternal indications

1. Maternal diseases
  - a. Diabetes
  - b. Hypertensive disorders
  - c. Autoimmune diseases e.g: SLE
  - d. Renal diseases
2. Pre-labor rupture of membranes
3. Pregnancy related complications
  - a. Pre-eclampsia
  - b. Intrahepatic cholestasis of pregnancy
  - c. Antepartum hemorrhage
4. Maternal request

### Fetal indications

1. Postmaturity
2. Intrauterine growth restriction
3. Oligohydramnios

4. Polyhydramnios
5. Rh-isoimmunisation
6. Intrauterine fetal demise
7. Lethal fetal malformation

Pregnancy continuing beyond term is the most common indication for induction.

According to Hilder et al there is a significant increase in the risk of still birth, neonatal and post neonatal mortality in prolonged pregnancy(6).

## CONTRAINDICATIONS FOR INDUCTION OF LABOUR

Induction of labor is contraindicated in certain situations like:

1. Gross cephalo-pelvic disproportion
2. Malpresentations
3. Major degree of placenta previa
4. Previous classical cesarean section or previous hysterotomy
5. Active genital herpes
6. High risk pregnancies with severely compromised fetus

## RISKS OF INDUCTION

Induction is associated with a threefold increased risk of emergency cesarean section in nulliparous women and a twofold increased risk in multiparous women compared to spontaneous onset of labor(7). The risks of chorioamnionitis and postpartum hemorrhage due to an atonic uterus are also higher in women who undergo labor induction.

## PRE-INDUCTION ASSESSMENT

Though labor induction is beneficial in certain situations, injudicious use for inappropriate indications can lead to increased maternal morbidity and poor neonatal outcomes and may also add to the ever rising cesarean delivery rates. Prior to induction the need has to be justified and any contraindication that may be present has to be excluded. The gestational age of the fetus has to be estimated and fetal lung maturity and wellbeing has to ensured.

## ASSESSMENT OF CERVICAL FAVOURABILITY

Preinduction cervical status is an important clinical factor that determines the outcome of induction process. Cervical status is assessed by the Bishops score which was put forward in 1964. It determines the dilatation, effacement, position, consistency of the cervix and the station of the fetal head.

### The Bishop score

Cervical feature	Bishop's score			
	0	1	2	3
Dilatation (cm)	0	1-2	3-4	>5
Effacement (%)	0-30	40-50	60-70	80
Station (relative to ischial spines)	-3	-2	-1/0	+1/+2
Consistency	Firm	Medium	Soft	-
Position	Posterior	Midposition	Anterior	-

### The Modified Bishop score

Cervical feature	Modified Bishop score			
	0	1	2	3
Dilatation (cm)	<1	1-2	2-4	>4
Length of cervix (cm)	>4	2-4	1-2	<1
Station (relative to ischial spine)	-3	-2	-1/0	+1/+2
Consistency	Firm	Average	Soft	-
Position	Posterior	Mid	Anterior	-

A total score of 13 is given for the cervix. Score between 6-13 is for a favorable cervix and a score less than 5 are for an unfavorable cervix. Induction of labor on an unfavorable cervix would increase the incidence of cesarean section for failed induction. Induction on a cervix with a score of more than 8 over 13 had similar incidence of vaginal delivery as compared to spontaneous labor. Induction on a ripened cervix has



fewer failed inductions, serial inductions, lesser maternal and neonatal morbidity and fewer cesarean sections(8). There are other scoring systems available for determining the favorability of cervix which are:

1. Field's 10 factor system in which relationship of date of induction to EDD, patient's attitude towards induction, estimated size of the fetus, presence of uterine contractions, recent increase in vaginal discharge are considered.
2. Brunett's Bishop's modification in which maximum score of 2 is given to each category. Effacement instead of cervical length is taken.
3. Cervical ultrasound
4. Fetal fibronectin level

According to Rovas et al Bishop's score, cervical length and parity are related to the success of labor induction, whereas cervical volume and 3D power Doppler examination are not (9).

Digital examination and transvaginal scan determine the cervical favorability with equal efficacy(10).

## CERVICAL CHANGES DURING RIPENING

Cervical stroma has less of smooth muscle and more of connective tissue consisting of collagen, elastin and proteoglycans. In non-pregnant women the cervix is firm and closed and is comparable to the nasal cartilage but by the end of pregnancy the cervix becomes soft and distensible and bears the consistency similar to the lips of the oral cavity. This change in the consistency of the cervix is brought about by a process called softening which occurs due to increased vascularity, stromal hypertrophy, glandular hypertrophy and hyperplasia and also structural changes in the extracellular matrix which occurs in the phase 1 of parturition. During phase 2 of parturition the cervix becomes soft and yields to the uterine contractions by dilating. This process of extensive remodeling is called ripening and is brought about by changes in the extracellular matrix composing of proteoglycans, collagen and glycosaminoglycan. The cross linked helical collagen fibrils undergo disorganization by the action of a matrix metalloprotease enzyme called collagenase which results in increased spacing between the fibrils.

The glycosaminoglycan hyaluronan and hyaluronan synthase 2 expression is increased in the cervix during ripening and there is an increased stromal invasion of inflammatory cells.

## PRE-INDUCTION CERVICAL RIPENING

Cervical ripening is defined as a component part of induction of labor employed when the cervix is unfavorable in order to facilitate dilatation when labor is established. During this process a series of complex biochemical changes occur in the cervical collagen and ground substance that is mediated by prostaglandins making the cervix soft and pliable. Several methods have been proposed for cervical ripening. There are non-pharmacological and pharmacological methods for cervical ripening.

Non- pharmacological methods:

1. Membrane sweeping
2. Transcervical catheter
3. Extra-amnionic saline infusion ( EASI )
4. Mechanical dilators, osmotic dilators.

Pharmacological methods:

1. Prostaglandins
  - (i) Dinoprostone ( PGE 2 )
  - (ii) Misoprostol ( PGE1)
2. Oxytocin
3. Steroid receptor antagonists
  - (i) Mifepristone ( RU 486 )
  - (ii) Onapristone ( ZK 98299 )
4. Relaxin

## **NON – PHARMCOLOGICAL METHODS**

### **SWEEPING OF MEMBRANES**

This involves separating the chorionic membrane from the decidua. It is achieved by an examining finger that is introduced into the cervix to stretch it and by rotatory movement the membranes are mechanically detached from the lower uterine segment. Prostaglandins are released from the membranes and oxytocin is released from the posterior pituitary by the Ferguson's reflex. As per NICE guideline membrane sweeping is recommended at 40 and 41 weeks for nulliparous women and at 41 weeks for multiparous women and should be offered before any formal induction(11). Membrane sweeping in low risk women at term reduces the frequency of pregnancy continuing beyond 41 weeks and also minimizes the need for formal induction(12). There is no increase in maternal or fetal infections following this. Routine use of sweeping of membranes from 38 weeks of pregnancy onwards does not seem to produce clinically important benefits(13).

### **TRANSCERVICAL CATHETERS**

The use of trans cervical catheters to facilitate cervical ripening is known to be a cost-effective, safe and reversible method with very less adverse effects on the uterus in terms of uterine hyperstimulation or abnormal fetal heart rate patterns and no systemic side effects(14).

Commonly a 14 F catheter is inserted into the cervical canal and the bulb is inflated above the internal os with 30 ml of distilled water and the catheter is kept on

gentle traction by strapping it to the patient's thigh and periodically adjusting it. It is allowed to be expelled spontaneously or removed after 12 hours after which oxytocin is started. The catheter causes a mechanical distension of the lower uterine segment leading to release of prostaglandins which help in ripening of the cervix. It can be used in conditions when pharmacological methods are contraindicated like on a uterus scarred by previous cesarean section. Following Foley's catheter insertion about 26.6% of women go into active labor without any interventions and there are negligible risks of maternal and fetal infections(15). A review of 13 trials using balloon catheters for cervical ripening has shown that either with or without extra amniotic saline infusion there is improvement of Bishop's score and decreased intervals to delivery(16). As per PROBAAT trial, in women with an unfavorable cervix at term, induction of labor with Foley's catheter is similar to induction of labor with prostaglandin E2 gel, with fewer maternal and neonatal side effects(17).

## EXTRA-AMNIOTIC SALINE INFUSION

In this method the Foley's catheter is inserted through the cervix in the space between the fetal membranes and the endometrium of the uterus and the bulb is inflated with 30 ml water. Saline is then continuously infused into the extra-amniotic space at a rate of 30-40 ml per hour. EASI does not improve the efficacy of labor induction when compared to Foley's catheter alone(18, 19). Compared to vaginally administered misoprostol, extra-amniotic saline infusion is associated with lesser maternal complications when used for cervical ripening and labor induction and also appears to be more effective(20).

## MECHANICAL DILATORS

Cervical dilatation can be achieved by placement of dilators into the cervical canal. Both natural and synthetic dilators are available. The natural dilator is made of seaweed and is called as Laminaria tents. Dilapan-S is a synthetic dilator. Once placed in the cervical canal these dilators by their hygroscopic nature absorb moisture and expand thereby mechanically dilating the cervix. They also release prostaglandins by disrupting the choriodecidual interface.

Hygroscopic dilators were earlier found to be successful for cervical dilatation when used for termination of pregnancy but more recently, they have also been used for cervical dilatation before labor induction. Dilapan was found to be as effective as compared to intracervical application of PGE2 gel in achieving vaginal delivery(21). The advantages of preinduction cervical ripening using mechanical dilators include low cost, low incidence of uterine hyperstimulation and low incidence of systemic side effects (13). But compared to the pharmacological agents there seems to be a higher incidence of infectious morbidity for the mother and the neonate when mechanical dilators were used(22).

## PHARMACOLOGICAL METHODS

### PROSTAGLANDINS

In the year 1935, Ulf von Euler a Swedish physiologist first isolated prostaglandin from the human semen and derived the term from the prostate gland. It was later seen that every living cell in the body produces prostaglandins. Prostaglandins are derived from the fatty acid arachidonic acid which is present in all nucleated cells. Under the action of phospholipase A<sub>2</sub>, diacylglycerol or phospholipids are converted to arachidonic acid which through the cyclooxygenase pathway form prostaglandins and thromboxane and by the lipo-oxegenase pathway form leukotriene. The cyclooxygenase pathway form prostacyclin, thromboxane and prostaglandin.

Prostaglandins are a group of long chain hydroxy fatty acids. They contain 20 carbon atoms including a 5 carbon ring and are unsaturated carboxylic compounds. They have autocrine and paracrine action. The main prostaglandins used clinically are PGE<sub>1</sub>, PGE<sub>2</sub> and PGF<sub>2</sub> $\alpha$ . All of them have potent oxytocic effects on the pregnant uterus. Prostaglandins have been used for labor induction since 1960's. PGE<sub>1</sub> and PGE<sub>2</sub> have been widely studied and used for cervical ripening. They act on the cervix and enable cervical ripening by altering the ground substance and increasing the collagenase activity. They also cause an increase in hyaluronic acid, dermatan sulfate and glycosaminoglycan and elastase activity in the cervix. Prostaglandins increase the uterine myometrial contractility by increasing the intracellular calcium levels. Apart from the uterus and cervix they also act on several target organs in the body and lack selectivity producing undesirable side effects like nausea, vomiting, diarrhea and fever. They are readily

metabolized in the body by conversion of the 15-hydroxy group to its corresponding ketone by the enzyme 15-hydroxyprostaglandin dehydrogenase.

## PROSTAGLANDIN E2.

There are two PGE2 preparations currently available in the United States – Prepidil and Cervidil. Prepidil is 0.5 mg of dinoprostone contained in 2.5 ml of gel and is used for intracervical administration. A maximum of 3 doses in 24 hours with a gap of 6 to 12 hours between each dose is recommended. Oxytocin for augmentation of labor must be started after 6 to 12 hours of the last dose to prevent uterine hyperstimulation.

Cervidil is a vaginal insert containing 10 mg of dinoprostone in a timed release formulation that releases 0.3 mg every hour. It is kept in place for 12 hours or until active labor begins. Compared to placebo, intracervical PGE2 increases the chances of achieving vaginal delivery within 24 hours and reduces the risk of cesarean section(23). The risk of hyperstimulation with fetal heart rate changes is not significantly increased but the risk of hyperstimulation without fetal heart rate changes is significantly increased(23). There is no difference between intracervical and intravaginal PGE2 in terms of hyperstimulation with or without fetal heart rate changes but the risk of not attaining vaginal delivery within 24 hours is increased with intracervical PGE2(23). It is thereby recommended that when used for induction of labor, intravaginal PGE2 is preferred to intracervical PGE2 as they are equally effective and administration of vaginal PGE2 is less invasive(2). Prostaglandin E2 has to be stored in a refrigerator at -



20°C and it has to be brought to room temperature before use. It is also costly compared to misoprostol.

## OXYTOCIN

Oxytocin is the commonest induction agent that is used worldwide. Before prostaglandins were introduced, oxytocin was used as an agent to ripen the cervix as well. Compared to expectant management, oxytocin was found to show a decrease in the number of unsuccessful vaginal deliveries within 24 hours. But use of prostaglandins for cervical ripening as compared to oxytocin would fasten the induction process and favor vaginal delivery within 24 hours of the induction with no difference in the cesarean section rate(24).

## OESTRADIOL

Estrogen has been suggested as a potent cervical ripening agent with its effects being mainly on the cervix with less effect of the uterus. Oestradiol is a natural estrogen analogue. Stilbestrol though a potent synthetic analogue of estrogen is no longer used because of its long term adverse effects on female children. 150-300 milligrams of estradiol in tylose gel has been used extra-amniotically, intracervically or vaginally for pre-induction cervical ripening. Compared to placebo gel there was no improvement in Bishop's score or the induction-to-delivery interval(25). Oestradiol gel is as effective as intravaginal PGE2 in causing a change in the Bishop's score and does not cause uterine hyperstimulation (26).

## RELAXIN

Relaxin is a hormone that is produced by the ovary, decidua and the chorionic membrane during pregnancy at term. Synthetic recombinant human relaxin was used to study its effect on the unripe cervix and it was found that 1.5 mg of the drug applied in the posterior vaginal fornix was ineffective compared to placebo(27). Another study used 1 to 4 mg of recombinant relaxin for cervical ripening and also found no difference between the groups and no effect on the cervix. All the four groups required PGE2 and oxytocin for augmentation(28).

## MIFEPRISTONE (RU-486)

Mifepristone is a progesterone receptor antagonist used as an abortifacient in first trimester pregnancies. It also has anti-glucocorticoid action. Progesterone is known to inhibit uterine contractions hence antiprogesterone can antagonize its action and initiate labor. Mifepristone is better than placebo at ripening the cervix and initiating labor(29). The action of RU-486 may be indirect and due to oestrogen receptor replenishment following the blockade of progesterone action.

## DHEAS

Has recently been used in Japan for the induction of cervical ripening. DHEAS induced IL-8 and IL-8 R in the human cervical fibroblasts and human pregnant cervical tissues at term in a dose-dependent manner(30).

## PROSTAGLANDIN E1

Misoprostol is a synthetic analogue of PGE1. Its chemical name is 15-deoxy-16-hydroxy-16-methyl-9-oxoprost-13 E-en-1-oate. It was mainly used for the treatment of gastric and duodenal ulcers caused by the use of non-steroidal anti-inflammatory drugs. It has been approved by United States for this particular use. In obstetrics, misoprostol is used for first and second trimester abortions and for cervical ripening before induction of labour. Misoprostol has not been approved by the Food and Drug Administration for any of its usage in obstetrics. It is manufactured by G.D Searle and Co. (now Pfizer) for the treatment of peptic ulcer and is marketed under the trade name 'Cytotec' in more than 70 countries. Compared to other prostaglandins, misoprostol is cheap, stable at room temperature and has fewer side effects.

## STRUCTURE AND CHEMISTRY OF MISOPROSTOL

The naturally occurring Prostaglandin E was found to reduce the gastric acid secretion and was used for the treatment of gastric ulcers.

The drawbacks of natural prostaglandins are

- (1) Rapid metabolism resulting in a lack of oral activity and short duration of action when given parenterally.
- (2) Numerous side effects.
- (3) Chemical instability leading to short shelf life.

Misoprostol differs structurally from prostaglandin E by the presence of a methyl ester at C-1, a methyl group at C-16 and a hydroxyl group at C-16 rather than at C-15. The methyl ester at C-1 increases its anti-secretory potency and duration of action of misoprostol, while the movement of hydroxyl group from C-15 to C-16 and the addition of methyl group at C-16 improves oral activity, increases duration of action and improves the safety profile of the drug.

## PHARMACOKINETICS OF MISOPROSTOL

Misoprostol tablets were initially developed to be used orally. Other routes of administration are also possible like sub-lingual, vaginal, buccal and rectal. Many studies looked at its pharmacokinetic properties through these routes. The three factors studied widely were peak concentration, time to peak concentration and the area under serum concentration versus time curve. The C<sub>max</sub> or peak concentration denotes how well the drug can be absorbed. T<sub>max</sub> or time to peak concentration denotes how rapidly the drug can be absorbed and the AUC denotes the total exposure to the drug. Misoprostol is extensively absorbed and rapidly undergoes de-esterification to its active form-misoprostol acid which is responsible for its clinical actions. Misoprostol-acid is readily detectable in the plasma unlike its parent compound. The alpha side chain undergoes beta oxidation and the beta side chain undergoes omega oxidation followed by reduction of the ketone to give prostaglandin F analogs.

## ORAL ROUTE:

Following oral administration misoprostol is rapidly absorbed and has a T<sub>max</sub> of 12±3 minutes. The mean plasma value of misoprostol after an oral route of administration has a linear relationship with the dose taken. C<sub>max</sub> of misoprostol acid diminishes when the dose is taken with food or antacids. C<sub>max</sub> when taken on an empty stomach and with breakfast was 811±317 pg/ml and 303 ±176 pg/ml respectively while T<sub>max</sub> was 14±8 minutes and 64±79 minutes respectively which were statistically significant. Less than 90% binds to serum protein. After oral administration of radiolabelled misoprostol, about 80 % is detected in the urine.

Oral route had a quicker onset of action of 8 minutes and a higher serum peak concentration compared to vaginal route (31). The duration of action of oral misoprostol is approximately 2 hours(32). The AUC after oral administration was only 54% of that after sublingual administration due to the first-pass metabolism of oral drug through the liver. Within 1 hour of administration misoprostol acid is secreted in the colostrum.

Route	Onset of action	Duration of action
Oral	8 minutes	2 hours
Sublingual	11 minutes	3 hours
Vaginal	20 minutes	4 hours
Rectal	100 minutes	4 hours

(32)

## VAGINAL ROUTE

Zeimen et al. studied the pharmacokinetics between oral and vaginal misoprostol. When administered vaginally, misoprostol has a slower absorption but a longer duration of action. The time to peak concentration between oral and vaginal drug was  $34 \pm 17$  minutes compared to  $80 \pm 27$  minutes which was statistically significant(33). The plasma levels gradually reach a peak within 70-80 minutes and then slowly declines with the drug still detectable up to 6 hours. The vaginal absorption of misoprostol is inconsistent and depends on the amount and pH of the vaginal secretions and is therefore different for every woman. Sometimes the tablet would be seen to be persistently present in the vagina after several hours of administration denoting its incomplete and variable absorption. Many people moisten the tablet with water before administration but evidence has proved that to be non-beneficial in increasing its bioavailability(31). Compared to sublingual route the AUC after vaginal administration is 58 % ( 23).

A meta-analysis of various randomized clinical trials on misoprostol was done by Hofmeyr et al to determine the best available evidence(34).

### Vaginal misoprostol versus placebo:

Compared to placebo, misoprostol is associated with lesser failure to achieve vaginal delivery in 24 hours ((RR) 0.51, 95% confidence interval (CI) 0.37 to 0.71) and increase in fetal heart changes and uterine hyperstimulation (RR 3.52 95% CI 1.78 to 6.99).

#### Vaginal misoprostol versus oxytocin:

Misoprostol was more effective than oxytocin for labour induction in the doses that were used in these trials (RR of failure to achieve vaginal delivery within 24 hours 0.48, 95% confidence interval (CI) 0.35-0.66). Uterine hyperstimulation with and without fetal heart rate changes was more common (RR 2.96, 95% CI 2.11-4.14). The rates of instrumental delivery were same. Regarding cesarean section the findings were varied. This could probably depend on the increased cesarean sections undertaken following misoprostol related hyperstimulation in certain centers and the difference in the management of hyperstimulation.

#### Misoprostol versus prostaglandins:

Buser et al reported significant cervical ripening within 12 hours after misoprostol(35). Failure to achieve vaginal delivery after 24 hours after misoprostol was reduced in four studies where women with intact membranes and unfavorable cervixes were studied (RR 0.71, 95% CI 0.62-0.81).

#### Misoprostol low dose regimen versus higher dose

There was no difference in risk of not attaining vaginal delivery within 24 hours and there was less uterine hyperstimulation in the lower dose group (16 trials, RR 0.51, 95% CI 0.37 to 0.69). There was more use of oxytocin in the low dose group. There was no difference in the mode of delivery and meconium passage and maternal side effects.

## SUBLINGUAL ROUTE:

Sublingual route has been recently studied for cervical ripening and abortions. The tablet is absorbed completely within 20 minutes when placed under the tongue. Sublingual route has the shortest time to peak concentration, highest peak concentration and greatest bioavailability when compared to all the other routes. Compared to oral misoprostol, sublingual route has a similar  $T_{max}$  but a higher  $C_{max}$ . It also has a higher bioavailability as shown by a larger AUC as it does not undergo first pass metabolism. The abundant blood supply below the tongue and the neutral pH also contribute to its rapid absorption. The systemic bioavailability is therefore highest after the sublingual route of administration.

## BUCCAL ROUTE:

This is another method of administration of misoprostol. The tablet is placed between the teeth and the cheek. The highest peak concentration is achieved in 75 minutes which is similar to the vaginal route but the bioavailability compared to the vaginal route is lesser as seen by the AUC(36). Sublingual route of administration has a higher area under the curve compared with buccal administration(37).



## RECTAL ROUTE

Misoprostol in the management of postpartum hemorrhage is widely administered by the rectal route. The time for peak concentration through this route is 40-65 minutes. The drug is absorbed in a similar fashion as the vaginal route but the area under the curve is only 1/3<sup>rd</sup> as compared to the vaginal route(36).

## EXCRETION

Misoprostol is mainly excreted by the kidneys. Dose adjustment is not required in patients with renal impairment but the dose may need to be reduced if the usual dose is not tolerated. After oral administration of misoprostol like in the management of postpartum hemorrhage, the drug was found in the breast milk within 30 minutes and the peak concentration in the breast milk was achieved in 1 hour which is double the time as observed in the plasma. The level in the breast milk becomes undetectable after 4-5 hours.

## PHARMACODYNAMICS

As misoprostol was initially used for protection against the ulcerogenic effect of NSAID's on the gastric mucosa, its anti-secretory and mucosal protective actions were noticed as the main effects while its action on the uterus and cervix were considered to be its side effects. Later the drug was widely studied on pregnant and non-pregnant women.

At term the number of prostaglandin receptors on the uterus increases. Misoprostol acts on these receptors and causes its action on the uterus and cervix.

## USES OF MISOPROSTOL

Even though misoprostol has not been approved by the FDA, it has been used widely in the field of obstetrics and gynecology. But human experiments to determine its appropriate dosage and safety are lacking. Animal studies have shown no evidence of fetotoxic, teratogenic or carcinogenic effects.

Early studies of misoprostol on the pregnant uterus have shown that results from animal studies cannot be extrapolated to determine its effects on the pregnant human uterus. Animal studies have shown that at the dose used for anti-ulcer treatment, misoprostol had no effect on the uterus. But human studies done by Rabe et al has shown that 200 mcg or 400 mcg of misoprostol used in the first trimester resulted in vaginal bleeding, abdominal pain and softening of the cervix(38). The effect of misoprostol as an abortifacient is significantly amplified when pretreated with mifepristone(39). Uninterrupted pregnancies following the use of misoprostol either alone or as an additional agent for termination in the first trimester, are known to be associated with anomalies in the fetus (40). The most logical etiology for the teratogenic effect of misoprostol is disruption of the developing vascular system caused by uterine contractions, resulting in orofacial and limb defects termed as Mobius syndrome. This occurs when the fetus is exposed to this agent between 5-8 weeks of gestation(41).

Therefore misoprostol is better avoided in pregnant women who intend to continue their pregnancies to term.

Subsequent studies have shown that intravaginal misoprostol can terminate first and second trimester pregnancies and was as effective as PGE<sub>2</sub> and also had the advantage of being less costly and easy to store and administer(42).

Use of misoprostol in the third trimester has been associated with increased incidence of uterine hyperstimulation irrespective of the dose used. This occurs due to the accumulative effect of misoprostol. Use of higher doses of misoprostol is associated with higher incidence of hyperstimulation, meconium passage and even cesarean section rate for fetal distress but many studies have failed to demonstrate any change in the cesarean delivery rate with the use of this drug(43).

Wing et al compared a 3 hourly schedule of 25 mcg vaginally administered misoprostol with that of a 6 hourly schedule. The 6 hourly schedules had lesser hyperstimulation and meconium passage but the difference did not reach statistical significance. Women who received the drug every 3 hourly had shorter labor duration from the time of induction and also required less oxytocin augmentation(44). Myometrial stimulation by misoprostol is probably dose related but optimal dosing of intravaginal misoprostol for cervical ripening and labour induction is yet to be determined. As per WHO recommendations low dose vaginal misoprostol of 25 mcg every 6 hourly is suggested for induction of labor(5).

Misoprostol administered orally at a dose of 50 mcg every 4 hours was found to be as effective and safe as vaginally or intracervically administered prostaglandins(45). The frequency of gastrointestinal side effects with oral misoprostol is less compared to orally administered dinoprostone. In women with pre-labor rupture of membranes, oral misoprostol was found to be useful for improving the cervical score and also for reducing the incidence of oxytocin infusion for labor induction and a decrease in the induction – delivery interval(46).

A double blinded randomized controlled trial was done by Dodd et al between 20 mcg of oral misoprostol administered every 2 hourly and vaginal dinoprostone gel given six hourly which found no difference between the two arms in terms of vaginal birth achieved in 24 hours from induction. There was no significant difference between maternal and neonatal adverse outcomes(47).

Adair et al conducted a double blind placebo controlled randomized trial between 200 mcg of oral misoprostol and 50 mcg of vaginal misoprostol repeated every 6 hourly and have shown similar efficacy between the two in terms of total length of labor and cesarean delivery rate. Oral misoprostol at this dose decreased the interval to the onset of uterine contractions but caused uterine hyperstimulation and tachysystole(48).

Topozada et al compared 100 mcg of misoprostol administered either orally or vaginally every 3 hourly. Vaginal misoprostol had shorter time interval to delivery but was associated with more abnormal FHR tracings and uterine hyperstimulation(49).

Another study done by Hall et al comparing 100 mcg of oral misoprostol and 25 mcg of vaginal misoprostol showed no difference between the delivery time or the rate of tachysystole between the two arms and they concluded that in a well-equipped hospital setting, oral misoprostol could be used as safely and effectively as its vaginal analogue (50).

Bennett et al studied 50 mcg of misoprostol administered every 4 hourly by oral or vaginal route and concluded that though oral misoprostol had a longer duration from induction to delivery compared to vaginal misoprostol, the incidence of cesarean section rate was similar between the two groups. There was a higher incidence of fetal heart rate changes in the vaginal misoprostol group. They suggested that until the optimal dosing interval for vaginal use is determined, the preferred route of misoprostol administration should be oral (51).

Shetty et al like Bennett et al studied 50 mcg of misoprostol by oral or vaginal route every 4 hourly for a maximum of 5 doses. They found that the vaginal route initiates labor faster but had a higher frequency of uterine hyperstimulation and higher intervention rate for fetal distress(52).

A randomized comparison of 100 mcg of oral misoprostol and 25 mcg of vaginal misoprostol given every 4 hourly done by Wing et al showed an increase in the need for oxytocin requirement, cesarean section rate and NICU admissions in the vaginal misoprostol group with no statistical significance. Though the induction delivery interval

was less in the oral misoprostol group, the incidence of uterine hyperstimulation and tachysystole was higher but with no statistical significance(53).

Wing et al also studied a lower dose of oral misoprostol i.e. 50 mcg every four hourly and 25 mcg vaginal misoprostol at the same frequency. They found that oral misoprostol at this dosage was less effective for cervical ripening though there was lesser hyperstimulation and cesarean section rate compared to vaginal misoprostol(54).

50 mcg of misoprostol by oral or vaginal route every 4 hourly was evaluated by Bano et al who concluded that misoprostol at this dose was as safe and effective as compared with vaginal misoprostol. There was no statistical difference between the induction – to –delivery interval, oxytocin requirement, cesarean section rate or meconium staining in both these groups(55).

Rasheed et al also studied between the same dose of 50 mcg misoprostol by oral or vaginal route administered every 4 – 6 hourly and found that the induction delivery interval was much higher in the oral misoprostol group ( 20.6 hours versus 13.5 hours,  $p < 0.01$ ) compared to the vaginal misoprostol group(56).

Kwon et al randomized women to receive 50 mcg of misoprostol orally or vaginally and every 6 hourly till the cervix was favorable for amniotomy, spontaneous rupture of membranes or active labor occurred and found that vaginal misoprostol resulted in shorter induction to delivery interval with fewer doses required per patient but

oral misoprostol was associated with lesser cesarean section rate and higher rate of hyperstimulation and oxytocin requirement(57).

50 mcg of oral misoprostol every 3 hourly and 50 mcg of vaginal misoprostol every 6 hourly for labor induction was studied by Fisher et al. Vaginal misoprostol every 6 hourly was more effective in achieving vaginal delivery faster than oral misoprostol at the same dose but shorter frequency of administration. Uterine hyperstimulation was higher in the vaginal misoprostol group(58).

The safety and efficacy of misoprostol orally and vaginally was assessed in a randomized controlled trial by Carlan et al in 1004 women at a dose of 200 mcg oral misoprostol with increase in dose to 300 mcg at subsequent dose and 50 mcg of vaginal misoprostol with increment to 100 mcg at subsequent dose. The induction to delivery interval was similar in both the groups thereby proving the similarity in the efficacy between oral and vaginal misoprostol at this dosage. But the oral misoprostol at this high dose was associated with higher incidence of uterine hyperstimulation and intervention(59).

Misoprostol in titrated doses was evaluated in two studies by Cheng et al and Colon et al. In the study done by Cheng et al patients were randomized to receive oral or vaginal misoprostol. The patients in the oral misoprostol group received 20 ml of a 1mcg/ml solution of misoprostol every 1 hourly for 4 hours and patients in the vaginal misoprostol group received 25 mcg every 4 hourly. The median interval from the first

dose of misoprostol to delivery in the oral group was 8.2 hours and in the vaginal group it was 17.6 hours ( $p < 0.01$ ). The requirement for oxytocin was much lesser in the oral group where only 10.9% required and 53.8% required in the vaginal group ( $p < 0.01$ ). Uterine hyperstimulation was absent in the oral group while 11% of patients in the vaginal group developed hyperstimulation ( $p < 0.01$ ). Cesarean section rate was also higher in the vaginal group (4% in the oral and 17% in the vaginal group) ( $p < 0.01$ ). 5.7 % of neonates from the vaginal group required NICU admission while non from the oral group required ( $p = 0.16$ )(60). This study proves that titrated oral misoprostol is associated with lesser cesarean section rate and is highly safe and efficacious compared to vaginal misoprostol.

In the randomized clinical trial done by Colon et al patients in the oral misoprostol group received 50 mcg of misoprostol initially and the dose was increased to 100 mcg after 4 hours. The patients in the vaginal misoprostol group received 25 mcg every 4 hourly for a maximum of 4 doses. There was no statistical significance between the induction- to – delivery interval, need for oxytocin administration, uterine hyperstimulation and meconium stained amniotic fluid. The incidence of cesarean section rate was lower in the oral misoprostol group 19.4% vs. 32.4% which was statistically significant ( $p < 0.05$ ). the NICU admissions were more in the oral misoprostol group(61).

Serious maternal outcome of death probably due to amniotic fluid embolism occurred in one study but the dose of misoprostol used was not mentioned (Wing 1996). Two maternal morbidities consisting of atonic postpartum hemorrhage requiring cesarean hysterectomies were reported. They concluded that though misoprostol was effective than



the other conventional methods used, its safety was not established and they recommended larger studies to exclude this possibility.

Windrim et al also concluded that oral misoprostol appears to be no less effective or safe than the available and accepted regimens for induction of labor at term and that it is well tolerated.

A drawback with the use of oral misoprostol is that if hyperstimulation with or without fetal heart rate changes occurred after oral misoprostol, intravenous tocolytic agent or even cesarean section must be resorted to. Lavage or removal of the tablet remnant, an option in vaginal misoprostol use is not possible.

Studies comparing oral and vaginal misoprostol for induction of labour

AUTHORS	REGIMEN	PATIENTS	IDI (MINS)	OXYTOCIN	HYPERSTIMULATION	MSAF	LSCSRATE	NICU	REFERENCE
Adair et al	200 mcg oral Q6h Vs 50 mcg vaginal Q6h	93  85	713.2±454.8  836.5±458.3  P=0.12	28%  32.9%  P=0.58	44.1%  21.2%  P<0.01	No mention	18.3%  15.3%  P=0.74	18.3%  12.9%  P=0.44	48
Topozada et al	100 mcg oral Q3h Vs 100 mcg vaginal Q3h	20  20	633±248  435±279  P<0.005	No mention	0  8  P<0.05	No mention	10  20  P<0.05	No mention	49
Benneth et al	50 mcg oral Q4h Vs 50 mcg vaginal Q4h	104  102	1072±593  846±385  P= 0.004	67.3%  57.8	  P<0.04	No Mention	15.3%  22.5  P=0.47	No mention	51
Hall et al	100mg Oral Q3-4h Vs 25 mcg vaginal Q3-4h	59  48	930±454  1074±488  P=0.11	79%  89%  p=0.31	No mention	15%  6%  P=0.07	15%  17%  P=0.72	0%  6%	50

AUTHORS	REGIMEN	PATIENTS	IDI (MINS)	OXYTOCIN	HYPERSTIMULATION	MSAF	LSCSRATE	NICU	REFERENCE
Shetty et al	50 mcg oral Q4H Vs 50 mcg vaginal Q4H Max 5 doses	122  123	27.9 hrs  17.8 hrs  RR=-10.1	55.2%  39 %  RR=1.5	0.8 %  4.9%  RR= 0.2	No mention	24.6 %  22.8 %  RR = 1.1	13.9 %  5.6 %  RR 2.4	52
Wing et al	100 mcg oral Q4H Vs 25 mcg vaginal Q4H	121  133	1240±845  1381±802  P=0.06	49.6%  52.2%  P=0.69	2.5%  0  P=0.25	12.4  13.3  P=0.84	12.4 %  22.1 %  P=0.07	28%  32%  P=0.53	53
Cheng et al	20 ml (1mcg/ml) Q1H x 4 doses orally Vs 25 mcg vaginally Q4H	101  106	8.2 hr  17.6 hr  P <0.01	10.9%  53.8%  P<0.01	0  11.3%  P<0.01	No mention	4%  17%  P<0.01	0  5.7 %  P=0.16	
Wing et al	50 mcg oral Q4h Vs 25 mcg Vaginally Q4h	110  110	1737.9±853  1393±767.9  P=0.02	75.4%  59.1%  P=0.01	1.8%  2.8%  P=0.01	19.1 %  10.9 %  P=0.09	13.6 %  22.7 %  P=0.08	26.4 %  28.2 %  P=0.76	54

Authors	regimen	Patient no	IDI	Oxytocin	Hyperstimulation	MSAF	LSCS	NICU	Reference
Rashed et al	50mcg oral Vs 50 mcg vaginal Q4-6H	165 145	20.6 hr 13.5hr P<0.01						56
Kwon et al	50 mcg oral Q6h Vs 50 mcg Vaginal Q6h	78 82	18.8 hr 11.9hr P=0.0014	78.2% 50.0% P<0.001	0 0 P=1	No mention	16.7% 23.2% P=0.41		57
Bano et al	50 mcg oral Q4h Vs 50 mcg Q4h vaginal	100 100	59 h 56 h P=0.33	93% 95% P=0.5	0 1% P0.31	25% 17% P=0.15	41% 42% P=0.67	No mention	55
Carlan et al	200 mcg oral Q6h ↑ to 300 mcg Vs 50 mcg vaginal Q6H ↑ 100 mcg 6 doses	503 501	24.5 hr 25.4 hr P=0.77	13.3% 8.4% P=0.01	18.6% 13.7% P=0.04	No mention	29.2% 24% P=0.06		59

Fisher et al	50 mcg Q3H oral Vs 50 mcg Q6H vaginal	62 64	23.1 hr 14.3hr P=0.0004	73% 42% RR 1.98	1.6% 7.8% RR 4.84	19.4% 18.9% P=1	19.4% 21.9% RR 1.13	14.6% 14.1% P=1	58
Colon et al	50 mcg oral Q4h ↑ to 100 mcg Vs 25 mcg vaginal Q4H	93 111	21.1+7.9 hr 21.5+1.1 hr P=NS	97.8% 97.3% P=NS	2.2 5.4 P=NS	9.7 9.9 P=NS	19.4 32.4 P<0.05	11.8 9.9 P=NS	61

## **METHODOLOGY**

This trial was a randomized double blinded placebo controlled trial (RCT) comparing oral and vaginal misoprostol for induction of labour in term pregnancies. The study was conducted between January 2012 to September 2012. The study protocol was reviewed and approved by the Institutional Review Board, Christian Medical College and Hospital, Vellore.

Term pregnant women admitted to the labour room and antenatal wards of the Obstetrics and Gynecology department of the Christian Medical College and Hospital, Vellore were recruited in the trial.

Randomization was computer generated using variable block sizes. Allocation was concealed by providing inducing agents in sealed opaque envelopes prepared by the Pharmacy department of Christian Medical College. Each opaque envelope was serially numbered based upon the randomization code.

Each envelope contained two separate plastic packets. One packet contained the oral drug and the other the vaginal placebo or vice versa. All packets were compartmentalized into 3 segments that were labeled 1,2,3 determining the first, second and the third tablet that was to be administered in that order. The oral drug and placebo and the vaginal drug and placebo looked identical. The drug was administered every 4 hourly. The randomization was blinded to the treating obstetrician and the patient because every patient received both the oral and the vaginal tablet one among which contained the drug and the other the placebo.

The oral drug included 50 mcg of misoprostol in the first dose, and 100 mcg drugs in both the second and the third dose. The vaginal drug included 25 mcg of the drug in all the three doses.

All patients with medical or obstetrical indications for induction of labour were recruited in the trial if they fulfilled the following criteria:

Inclusion criteria:

Pregnancy between 37 and 42 weeks of gestation

Single, live fetus in cephalic presentation

Reassuring fetal heart rate and with intact membranes

Informed consent was taken from these patients and then vaginal examination was done to determine the Bishop's score. Those with a score less than 6 were randomized by selecting the next serially numbered envelop.

Exclusion criteria include-

Non-reassuring fetal heart status,

Ruptured membranes,

Previous uterine scar,

Bishop's score more than or equal to 7, and

Contraindication to vaginal delivery.

Demographic data and baseline characteristics were documented.

Thus the women were randomized to receive either

a) Oral drug with vaginal placebo

or

b) Vaginal drug with oral placebo

Every four hourly, uterine contractions were watched for and the Bishop's score was assessed and the next scheduled drug with placebo was administered only if there were no contractions and the Bishop's score was less than 6. If the patient developed uterine contractions and the Bishop's score at that point was less than 6, the drug was delayed till the contractions disappeared by checking every hourly.

Each drug was administered every four hourly until all the three drugs were used or Bishop's score became more than 6 or patient developed regular uterine contractions. Four hours after the last dose amniotomy was done and if required labour augmentation was done using oxytocin. Cervical findings at amniotomy were documented and Bishop's score was assessed. In labour all patients had continuous fetal heart rate monitoring using the cardiotocogram. All further interventions were left to the discretion of the treating obstetrician.

Regular uterine contractions were defined as more than 4 contractions in 10 minutes, each lasting for more than 20 seconds. Uterine hyperstimulation was defined as more than 5 contractions in a 10 minute window. Fetal heart rate changes considered to be non-reassuring were recurrent decelerations (early, variable or late), fetal bradycardia (fetal heart rate less than 100 beats per minute lasting for more than 3 minutes) fetal



tachycardia (fetal heart rate more than 160 beats per minute) tachycardia with poor variability( reduced short term variability of less than 5 beats per minute ).

The primary outcomes were the percentage of women who delivered vaginally within 24 hours of induction, uterine hyperstimulation with fetal heart rate changes and the cesarean section rate. The secondary outcomes to evaluate effectiveness were cervix unfavourable after 12 hours and the need for oxytocin augmentation. The secondary measures to evaluate safety included serious neonatal morbidity and perinatal death, serious maternal morbidity or death, meconium stained liquor, Apgar score less than 7 at 5 minutes, neonatal intensive care unit admissions, maternal nausea, vomiting, diarrhea, fever and postpartum hemorrhage of more than 500 ml blood loss.

#### **SAMPLE SIZE:**

We calculated our sample size using information from a randomized controlled trial between oral and vaginal misoprostol done by Cheng et al. To show a difference of 6% across oral versus vaginal misoprostol in terms of achieving vaginal delivery within 24 hours the sample size was found to be 389 in each arm with 80% power and 5% level of significance.

## DATA ANALYSIS

Statistical analysis was carried out using commercial software SPSS (Statistical Package for Social Sciences) Version 17. The descriptive measures like mean, median and standard deviation for continuous variables were obtained. Frequencies and percentages were calculated for all categorical variables. Fisher's exact test was done to compare the groups across all categorical variables and t-test or Mann Whitney U test was used to compare across the groups for all continuous variables.

## RESULTS

A total of 778 patients were randomized in the study. 15 women were excluded after the randomization as their data could not be collected.

There were 763 women who completed the study. 380 women received the vaginal drug and oral placebo while 383 women received the oral drug and the vaginal placebo.

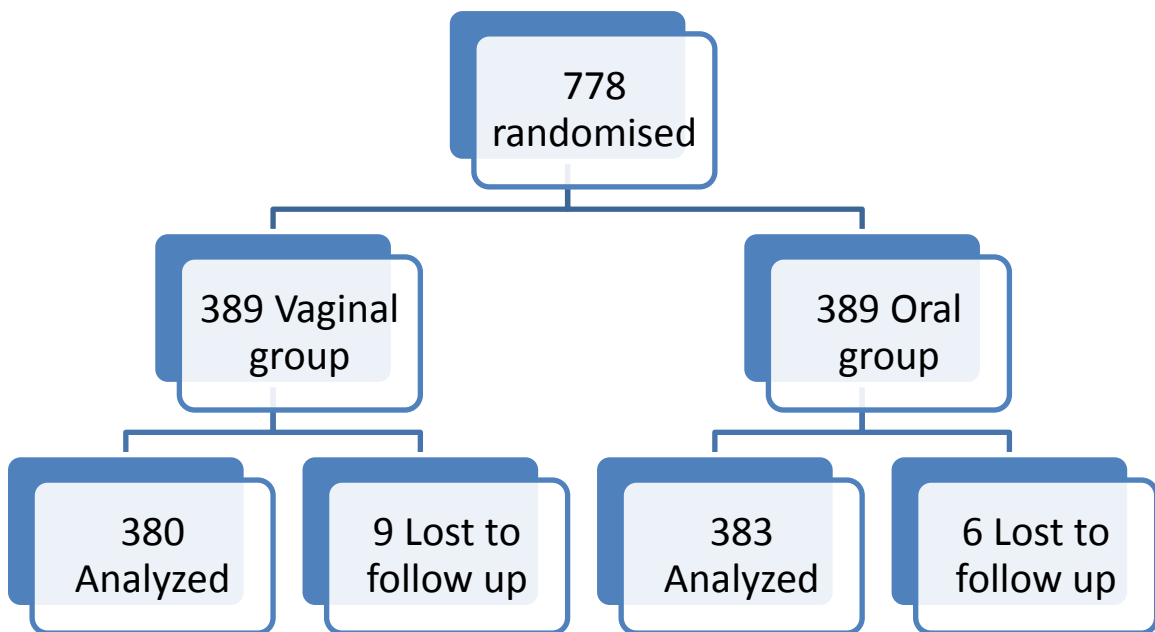
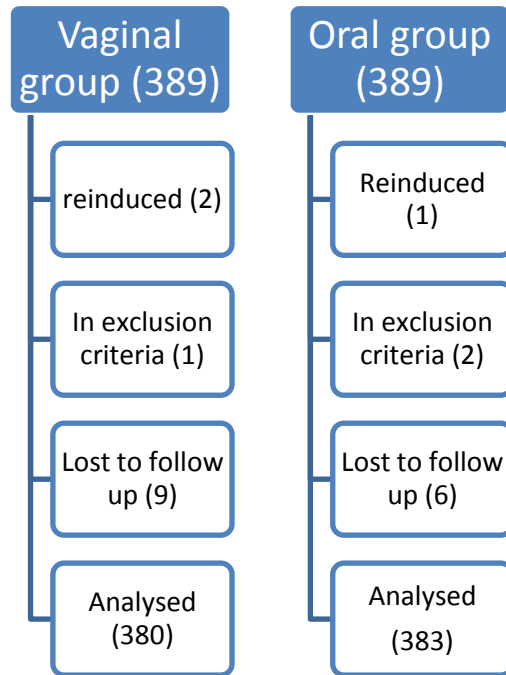


Figure 1: **Number of patients analyzed in each group.**

Figure 2: **Patient Disposition**



2 patients in the vaginal misoprostol group and 1 patient in the oral misoprostol had no progress in Bishop's score after 3 doses of the respective drug and induction was withheld and they were reinduced after a span of 24 hours with routine method of 25 mcg vaginal misoprostol every 6 hourly.

1 patient in each of the two groups with breech presentation was wrongly induced and 1 other patient with history of prelabor ruptured membranes was induced with oral misoprostol.

Out of the missing charts, 9 were from the vaginal misoprostol group and 6 from the oral misoprostol group. These patients were lost to follow up.

## Demographic characteristics

Patient characteristics prior to treatment showed no difference between the two groups.

There was no significant difference between the maternal age and BMI. The average age in the vaginal group was 25.04 years with a range of 17 – 39 years. The mean age in the oral misoprostol group was 25.53 ranging between 17 and 36 years.

## Age distribution

Table 1: Comparison of age between vaginal and oral group

<b>Group</b>	<b>Mean age</b>	<b>SD</b>	<b>Minimum age</b>	<b>Maximum age</b>
Vaginal	25	4.15	17	39
Oral	25.5	3.8	17	36

## Height

The average height in both the groups was 156 cm.

Table 2: Comparison of height between the two groups

<b>Group</b>	<b>Mean</b>	<b>SD</b>	<b>Minimum</b>	<b>Maximum</b>
Vaginal	156.8	5.67	140	177
Oral	156.2	6.2	134	175

### **Body mass index**

The mean body mass index in the vaginal misoprostol group was 27.74 kg/m<sup>2</sup> and in the oral misoprostol group was 28 kg/m<sup>2</sup>.

Table 3: Distribution of BMI

<b>Group</b>	<b>Mean</b>	<b>SD</b>	<b>Minimum</b>	<b>Maximum</b>
Vaginal	27.7	4.6	16.87	44.89
Oral	28	4.7	17.3	50.18

### **Gestational age**

The patients in the study were between 37 weeks and 42 weeks of gestational age. The mean gestational age in the vaginal group was 39.8 and in the oral group was 39.7.

Table 4: Distribution of gestational age within each group

<b>Group</b>	<b>Mean</b>	<b>SD</b>	<b>Minimum</b>	<b>Maximum</b>
Vaginal	39.8	1.01	37 weeks	42 weeks
Oral	39.7	1.1	37 weeks	42 weeks

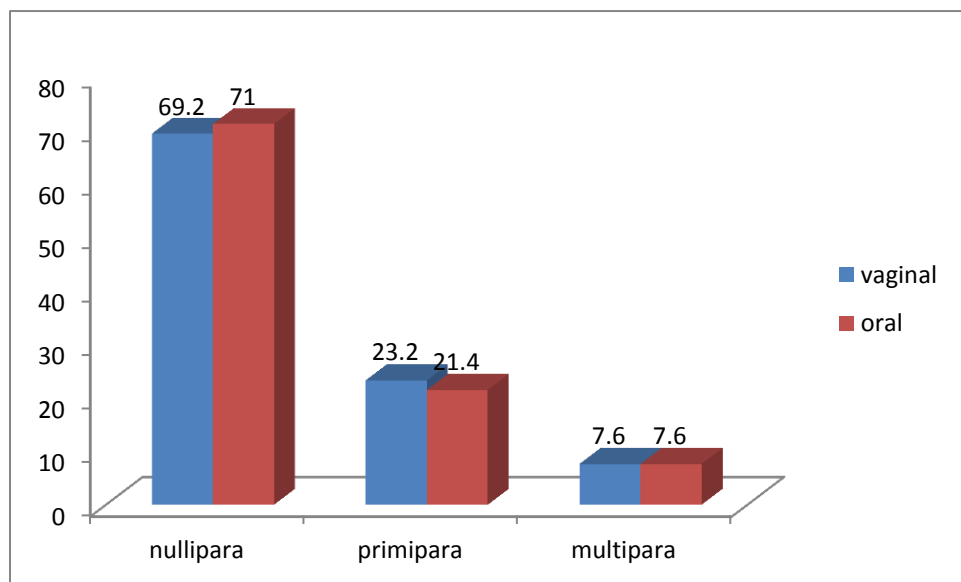
### Distribution of parity

There were 535 nulliparous, 170 primiparous and 58 multiparous patients in the study inclusive of both the groups. In the vaginal group 69.2% were nulliparous 23.2 % were primiparous and the rest 7.6 % were multiparous patients. While in the oral group 71 % were nulliparous, 21.4% were primiparous and 7.6 % were multiparous.

Table 5: Distribution of parity within each arm:

Parity	Vaginal group	Oral group	Total
Nulliparous	263	272	535
Primiparous	88	82	170
Multipara	29	29	58
Total	380	383	763

Figure 3: Percentage distribution of parity between the two arms.



### **Bishop score at induction**

The Bishop Score at the time of induction in both the arms ranged between 0 and 6 with a mean of 3.32 in the vaginal group and 3.24 in the oral group.

Table 6: Bishop score at induction

<b>Group</b>	<b>Mean</b>	<b>Standard deviation</b>
Vaginal	3.32	1.09
Oral	3.24	1.06

### **Number of doses of misoprostol used**

All patients were induced with misoprostol either the vaginal route or the oral route along with placebo. The median number of doses of misoprostol used in the vaginal and oral group was 2 in each group.

Table 7: Number of doses of misoprostol used

<b>Group</b>	<b>Median</b>	<b>IQR</b>
Vaginal misoprostol	2.00	2-3
Oral misoprostol	2.00	2-3

Note: IQR (Inter Quartile Range)

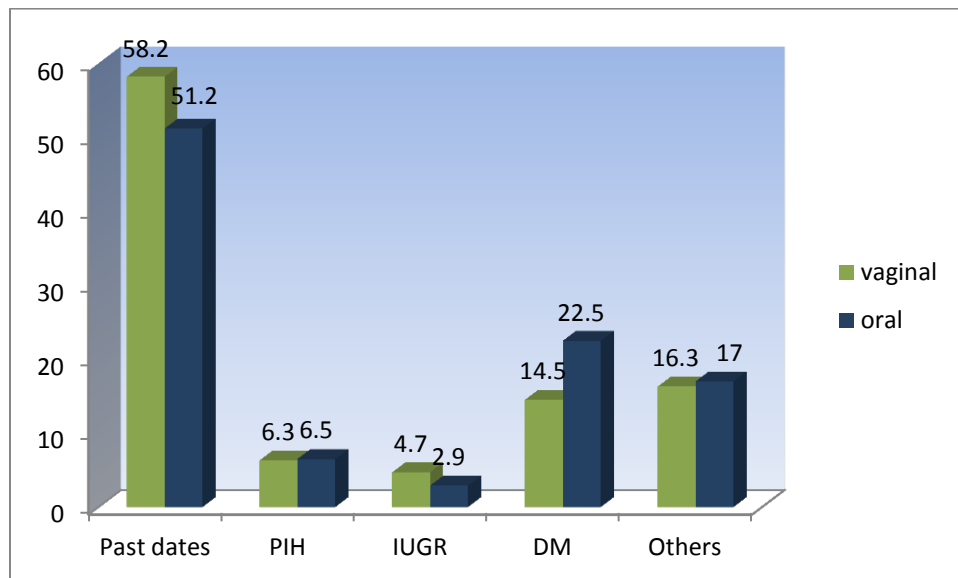


## Indication for induction of labour

Table 8: Indications for induction in either group were distributed as follows:

Indication	Vaginal group n (%)	Oral group	Total
Past dates	221(58.2%)	196(51.2%)	417(54.7%)
PIH	24(6.3%)	25(6.5%)	49(6.4%)
IUGR	18(4.7%)	11(2.9%)	29(3.8%)
GDM	55(14.5%)	86(22.5%)	141(18.5%)
Others	62(16.3%)	65(17%)	127(16.6%)
Total	380	383	763

Figure 4: Percentage distribution of the various indications for induction between the two groups.



### **Bishop score at ARM**

The median bishop's score at the time of artificial rupture of membranes was similar in both the groups.

Table 9: Bishop score at ARM

	<b>Median</b>	<b>IQR</b>
<b>Vaginal group</b>	5	5-7
<b>Oral group</b>	5	5-7

Note : IQR ( inter quartile range)

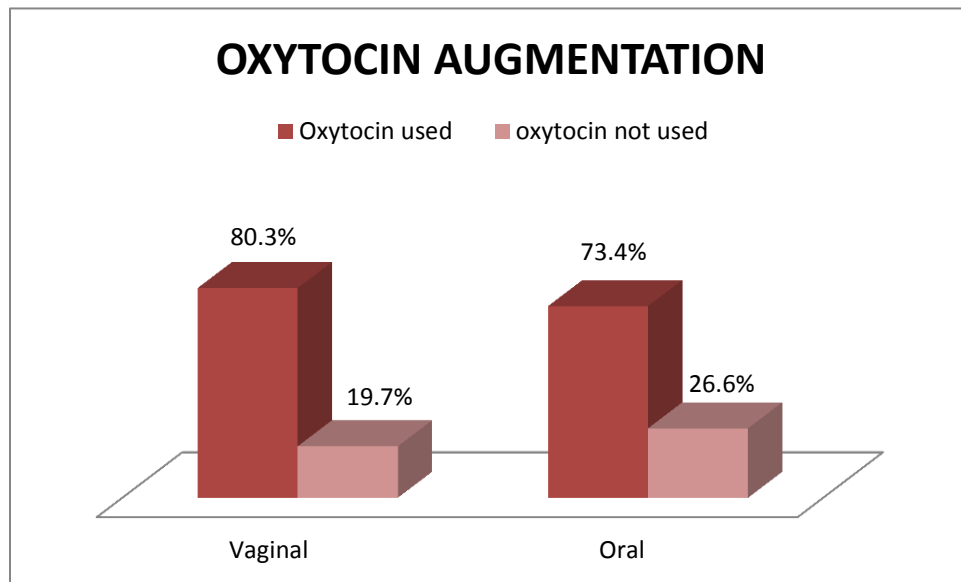
## Oxytocin requirement

Oxytocin was required for augmentation of labor in 80.3% of patients in the vaginal group while only 73.4% of patients in the oral group required it.

Table 10: Percentage distribution of oxytocin requirement

Oxytocin	Vaginal group	Oral group	Total	P value
Required	305(80.3%)	281(73.4%)	586	0.026
Not required	75(19.7%)	102(26.6%)	177	

Figure 5: Percentage distribution of oxytocin augmentation



### Units of oxytocin used

The median number of units of oxytocin used in the vaginal and oral group was 2.5 in each.

Table 11: Median of units of oxytocin required in each group

	<b>Median</b>	<b>IQR</b>
<b>Vaginal group</b>	2.500	2.5-2.5
<b>Oral group</b>	2.500	2.5-2.5

### Mode of delivery

Among all the patients induced, 438 delivered vaginally, 150 patients required assistance by instrumentation and 175 patients delivered by cesarean section.

Table 13: **Mode of delivery**

<b>Mode of delivery</b>	<b>Vaginal group n(%)</b>	<b>Oral group n (%)</b>	<b>Total n (%)</b>
Vaginal	223(58.7%)	215(56.1%)	438 (57.4%)
Instrumental	77(20.3%)	73(19.1%)	150 (19.7%)
Cesarean section	80(21.1%)	95(24.8%)	175(22.9%)
Total	380	383	763

P value = 0.466

Figure 6: Mode of delivery in the vaginal misoprostol group

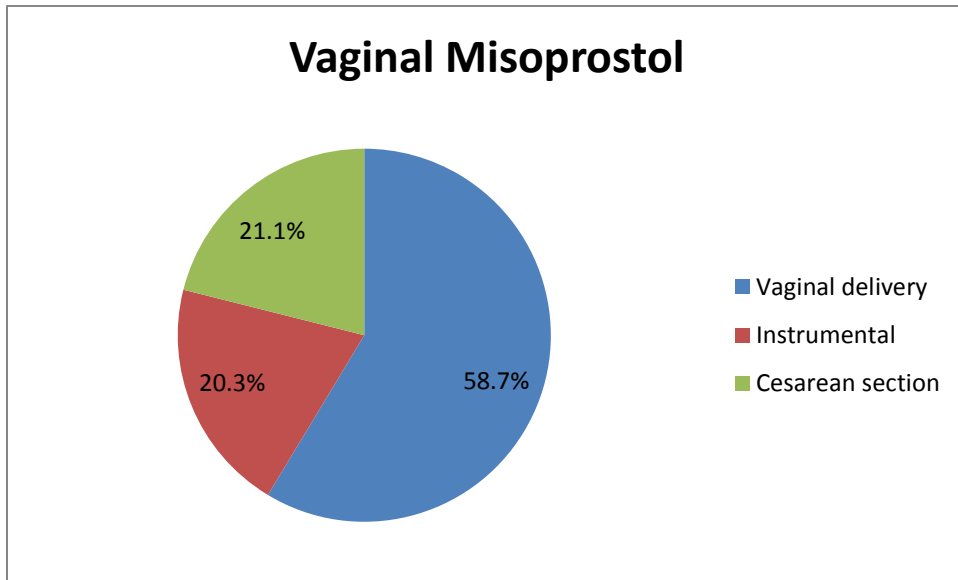
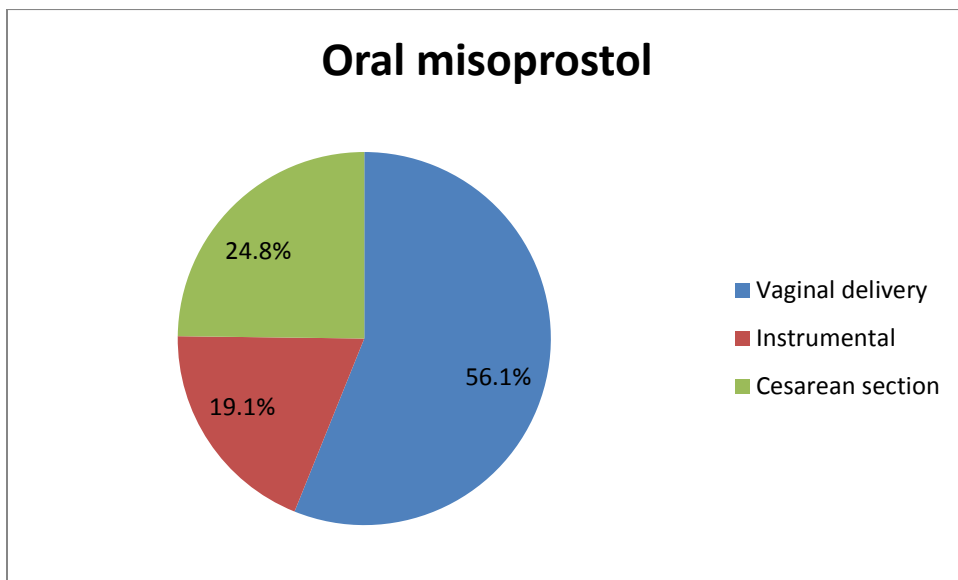


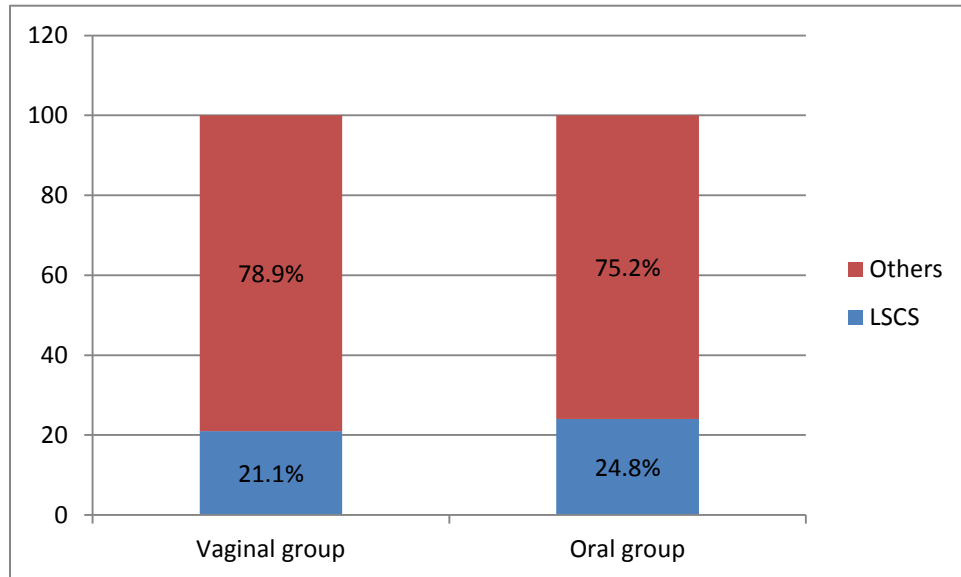
Figure 7: Mode of delivery in the oral misoprostol group



## Cesarean section rate

Cesarean section rate between the vaginal and the oral misoprostol group was 21.1% and 24.8%.

Figure 8: Percentage distribution of cesarean section between the two arms



## Indications for cesarean section

Table 15: The various indications for emergency cesarean section

	<b>Vaginal group</b>	<b>Oral group</b>	<b>Total</b>
Trace abnormality	46(12.1% )	52 (13.6%)	98 (12.8%)
Trace abnormality due to hyperstimulation	2 (0.5%)	2 (0.5%)	4 (0.5%)
Failure to progress	13 (3.4%)	7 (1.8%)	20 (2.6%)
CPD	4 (1.1%)	4 (1.0%)	8 (1.0%)
Malpresentation	1 (0.3%)	2 (0.5%)	3 (0.4%)
Failed induction	25 (6.6%)	38 (9.9%)	63 (8.3%)
Not applicable*	282 (74.2%)	276 (72.1%)	558 (73.1%)
MSAF	2 (0.5%)	1 (0.3%)	3 (0.4%)
Prolonged second stage	4 (1.1%)	0 (0%)	4 (0.5%)
IUGR with low AFI	0 (0.0%)	1 (0.3%)	1 (0.1%)
Arrest of dilatation	1 (0.3%)	0 (0%)	1 (0.1%)
<b>Total</b>	<b>380</b>	<b>383</b>	<b>763</b>

\*- vaginal deliveries

CPD : cephalopelvic disproportion; MSAF : meconium stained liquor

IUGR: Intrauterine growth restriction; AFI : Amniotic fluid index

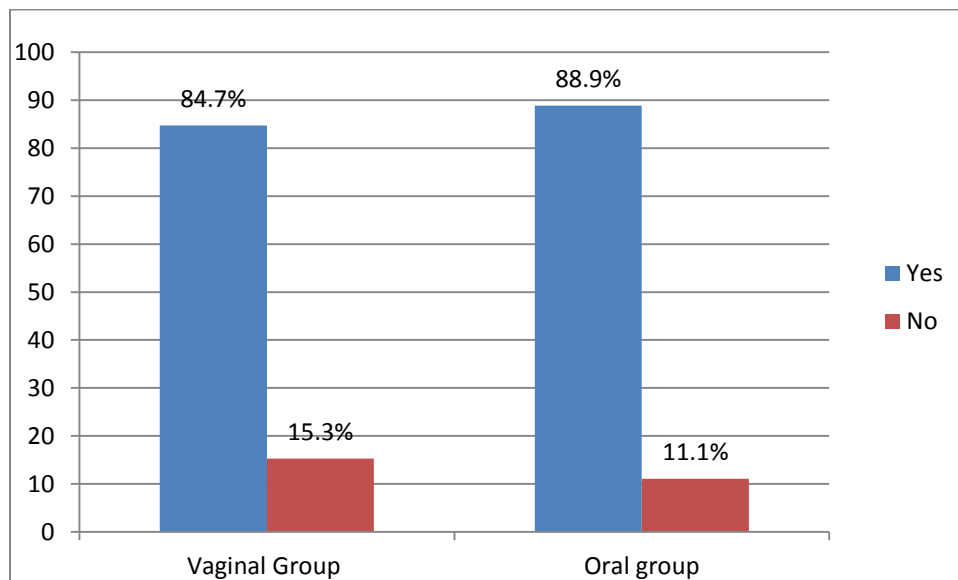
### Vaginal delivery in 24 hours

Among the 762 patients who were analyzed, 510 patients delivered vaginally within 24 hours from the start of induction, 78 patients delivered vaginally after 24 hours while 174 patients underwent cesarean section.

Table 16: Vaginal delivery achieved within 24 hours from induction

	Vaginal group	Oral group	Total	P-Value
< 24 hours	254 (67%)	256 (66.8)	510 (66.9%)	0.137
> 24 hours	46 (12.1%)	32 (8.4%)	78 (10.2%)	
LSCS	79 (20.8%)	95 (24.8%)	174 (22.8%)	
<b>Total</b>	379	383	762	

Figure 9: Percentage of patients delivered in 24 hours from the start of induction.



P-value = 0.145



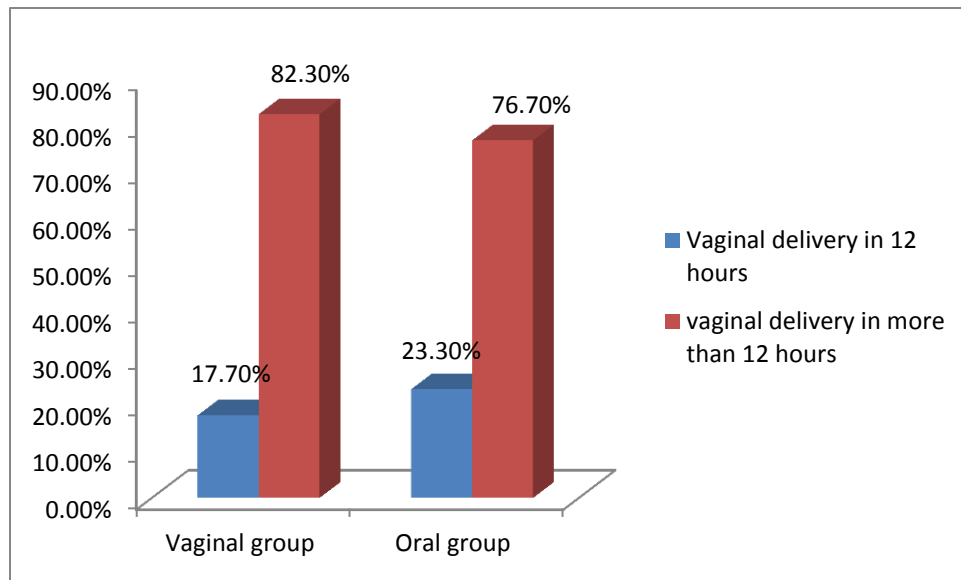
## Vaginal delivery achieved in 12 hours

Within 12 hours of induction 53 patients in the vaginal group and 67 patients in the oral misoprostol group had delivered vaginally.

Table 17: Vaginal delivery in 12 hours from the start of induction

	Vaginal group	Oral group	P-Value
<b>Less than 12 hours</b>	53 (17.7%)	67 (23.3 %)	0.102
<b>More than 12 hours</b>	247 (82.3%)	221 (76.7%)	

Figure 10: Percentage distribution of vaginal delivery achieved in 12 hours



### **Induction to delivery interval**

The median duration from the start of induction to delivery was 969.00 minutes in the vaginal misoprostol group and 932.00 minutes in the oral misoprostol group.

Table 18: Induction to delivery interval in minutes

	<b>Median (IDI)</b>	<b>IQR</b>
<b>Vaginal group</b>	969.000 minutes	730-1183
<b>Oral group</b>	932.000 minutes	654-1179

P value = 0.240

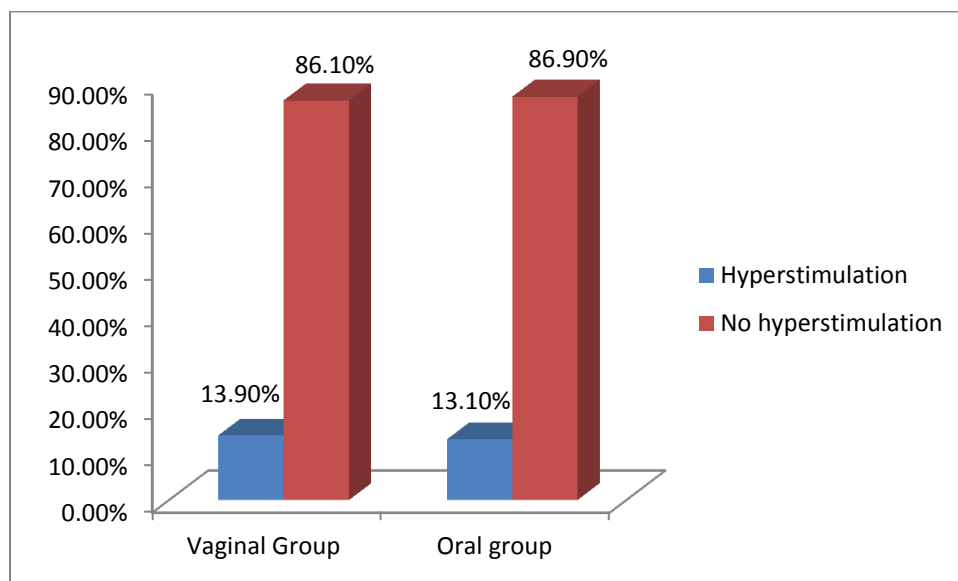
## Uterine hyperstimulation

13.5 % of the patients had uterine hyperstimulation with or without trace abnormality of which 53 patients were in the vaginal group and 50 patients in the oral misoprostol group.

Table 18 : Incidence of uterine hyperstimulation

	Vaginal group	Oral group	Total	P-value
<b>Hyperstimulation</b>	53 (13.9%)	50 (13.1%)	103	0.718
<b>No hyperstimulation</b>	327 (86.1%)	333 (86.9%)	660	

Figure 11: Percentage distribution of uterine hyperstimulation with or without trace abnormality.



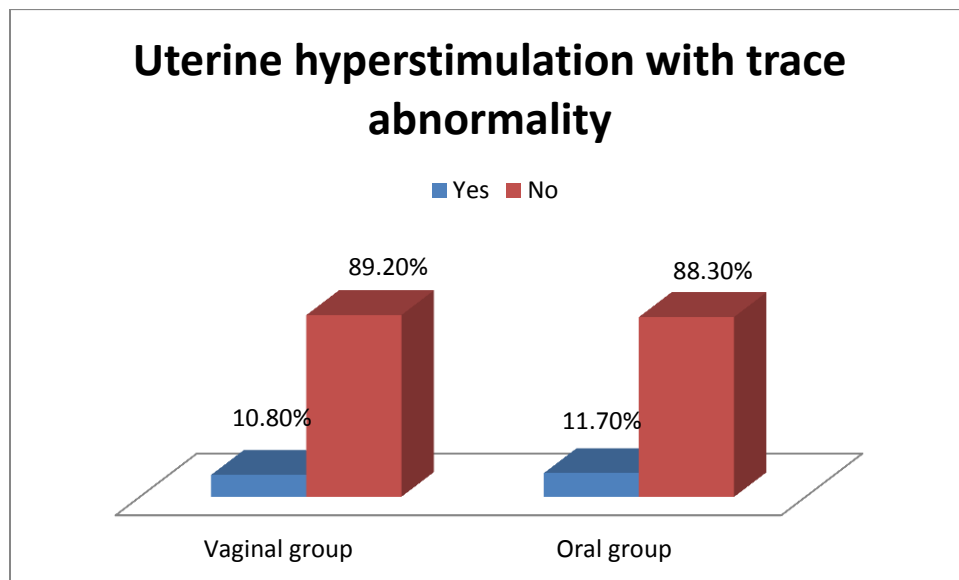
### Uterine hyperstimulation with trace abnormality

Of the vaginal misoprostol group 41 patients had uterine hyperstimulation with trace abnormality and 45 patients in the oral group had uterine hyperstimulation with trace abnormality.

Table 19: Uterine hyperstimulation with trace abnormality

	Vaginal group	Oral group	Total	P Value
<b>Yes</b>	41 (10.8%)	45 (11.1%)	86 (11.3%)	0.732
<b>No</b>	339 (89.2%)	338 (88.3%)	677 (88.7%)	

Figure 12: Percentage distribution of uterine hyperstimulation with trace abnormality



### Trace abnormality

Trace abnormality was detected in 167 patients in the vaginal misoprostol group and 163 patients in the oral misoprostol group.

Table 20: Trace abnormality

	Vaginal group	Oral group	Total	P-Value
<b>Trace abnormality</b>	167 (43.9%)	163 (42.6%)	330(43.3%)	0.715
<b>No trace abnormality</b>	213 (56.1%)	220 (57.4%)	433(56.7%)	

### Terbutaline requirement

Terbutaline for uterine hyperstimulation with or without fetal heart rate changes was required for 12 patients in the vaginal misoprostol group and 21 patients in the oral misoprostol group.

Table 21: Percentage of patients requiring terbutaline.

	Vaginal group	Oral group	Total	P-value
<b>Requiring</b>	12 (3.2%)	21 (5.5%)	33	0.173
<b>Not requiring</b>	368 (96.8%)	361 (94.3%)	729	

### Type of trace abnormality

The types of trace abnormalities varied between tachycardia, early decelerations, variable decelerations, late decelerations, prolonged bradycardia, and tachycardia with poor variability that were distributed as follows:

Table 22: Types of trace abnormality

	<b>Vaginal group</b>	<b>Oral group</b>	<b>P value</b>
<b>Early decelerations</b>	9 (5.4%)	5 (3.1%)	0.579
<b>Variable decelerations</b>	124 (74.3%)	124 (76.1%)	
<b>Late decelerations</b>	0	1 (0.6%)	
<b>Bradycardia (prolonged)</b>	14 (8.4%)	12 (8%)	
<b>Tachycardia</b>	7 (4.2%)	10 (6.1%)	
<b>Tachycardia with poor variability</b>	7 (4.2%)	8 (4.9%)	
<b>Others</b>	6 (3.6%)	2 (1.2%)	
<b>Total</b>	167	163	

## Maternal complications

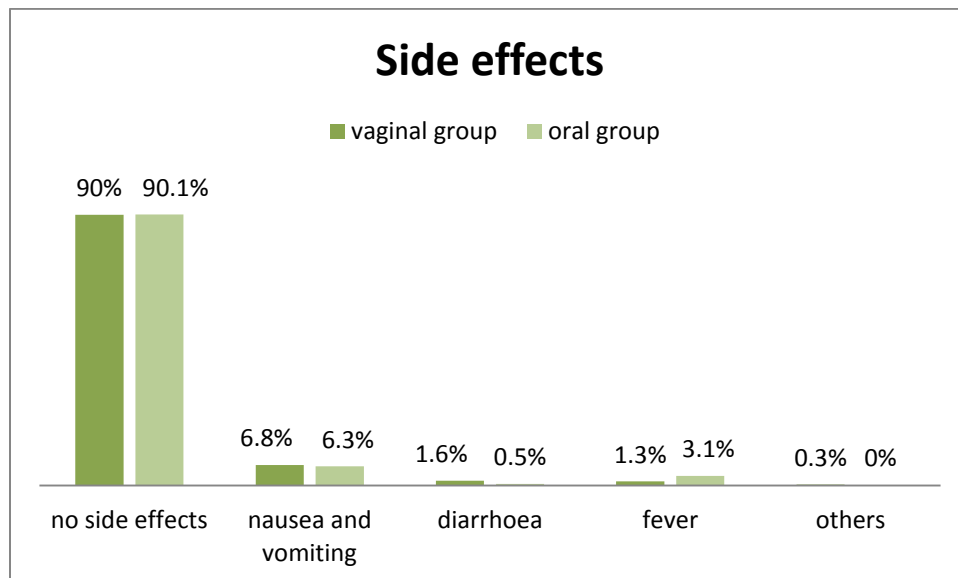
Serious maternal side effects like postpartum hemorrhage and retained placenta had occurred in 3 patients from the vaginal misoprostol group and 4 patients from the oral misoprostol group.

Table 23: **Serious maternal outcomes**

	Vaginal group	Oral group	P-value
Yes	3 (0.8%)	4 (1.0%)	1.000
No	377 (99.2%)	379 (99%)	

Other maternal side effects were also observed among patients in both the groups

Figure 13: **Minor maternal side effects in percentages**



P Value = 0.202

### Meconium stained liquor

Meconium staining of the amniotic fluid was seen in 98 women included in the study of which 47 women were in the vaginal misoprostol group and 51 women were in the oral group.

Table 24: Distribution of Meconium stained amniotic fluid

	Vaginal group	Oral group	Total	P-Value
<b>MSAF</b>	47 (12.4%)	51 (13.3%)	98 (12.8%)	0.746
<b>No MSAF</b>	333 (87.6%)	332 (86.7%)	665 (87.2%)	

### Chorioamnionitis

7 patients developed chorioamnionitis of which 6 were in the oral misoprostol group.

Table 25: Distribution of chorioamnionitis

	Vaginal group	Oral group	P-Value
<b>Yes</b>	1 (0.3%)	6 (1.6%)	0.123
<b>No</b>	379(99.7%)	377 (98.4%)	



## BIRTH WEIGHT

The average birth weight in both the group was 3075.39 gms and 3104.46 gms in the vaginal and oral misoprostol group respectively.

Table 26: mean birth weights in the two groups

	Mean	Standard Deviation	P value
<b>Vaginal group</b>	3075.39 gms	383.046	0.296
<b>Oral group</b>	3104.46 gms	384.457	

## NEONATAL COMPLICATIONS

### APGAR SCORE < 7 at 5 minutes

One neonate from the oral misoprostol group had a 5 minute Apgar score < 7.

Table 27: Apgar score <7 at 5 minutes

	Vaginal group	Oral group	P value
Yes	0 (0%)	1 (0.3%)	1.000
No	380 (100%)	382 (99.7%)	

### **CORD pH < 7.1**

Cord pH < 7.1 was seen in 3 neonates, 2 of them belonged to the oral misoprostol group.

Table 28:

	<b>Vaginal group</b>	<b>Oral group</b>	<b>Total</b>	P value
<b>Yes</b>	1 (0.3%)	2 (0.5%)	3 (0.4%)	0.881
<b>No</b>	5 (1.3%)	5 (1.3%)	10 (1.3%)	
<b>Not done</b>	2 (0.5%)	1 (0.3%)	3 (0.4%)	
<b>Not necessary</b>	372 (97.9%)	375 (97.9%)	747 (97.9%)	

### **NICU ADMISSION**

21 neonates were admitted to the neonatal intensive care unit of which 10 were in the vaginal misoprostol group and 11 were in the other group.

Table 29: NICU admission

	<b>Vaginal group</b>	<b>Oral group</b>	<b>Total</b>	<b>P value</b>
<b>Yes</b>	10 (2.6%)	11 (2.9%)	21 (2.8%)	1.000
<b>No</b>	370 (97.4%)	372 (97.1%)	742 (97.2%)	

## NEONATAL ENCEPHALOPATHY

Neonatal encephalopathy was observed in 2 babies in the vaginal misoprostol group and 1 from the oral misoprostol group while sepsis was suspected in 2 babies from the vaginal misoprostol group.

Table 30: Number of neonatal serious complications

	<b>Vaginal group</b>	<b>Oral group</b>	<b>P value</b>
<b>Encephalopathy</b>	2	1	0.632
<b>Sepsis</b>	2	0	0.248

## DISCUSSION

Many studies have been done world-wide to determine the most effective, safe and feasible agent that can be used for ripening of the cervix and in effect bring about induction of labor so that the benefits of delivery will outweigh the risks of continuing the pregnancy. FDA has approved dinoprostone as a gold standard drug for this purpose but its cost and storage requirements makes its availability an unachievable factor for the people in the developing nations. Hence, a large number of trials including randomized controlled trials have been done on a prostaglandin analogue- misoprostol which is cheap, easy to administer and also widely marketed.

A systematic review was done by Hofmeyer et al on misoprostol(62) . They showed that misoprostol was more effective in achieving vaginal delivery than the other conventional methods of cervical ripening, though there were incidences of uterine hyperstimulation and fetal heart rate changes. WHO has recommended 25 mcg as the safest and optimal dose for vaginal use of misoprostol in term pregnancies, with least number of complications. Though oral misoprostol has been proved to be as effective as vaginal misoprostol in multiple trials, its optimal dose is not yet established(48,50).

The purpose of this study was to determine the safety and efficacy of oral misoprostol in a novel titrated dosing regimen and compare it with the standard regimen of vaginal misoprostol at a dose of 25 mcg every 4 hourly.

Uterine hyperstimulation and strong contractions with oral misoprostol was always a concern with higher doses though they achieved vaginal delivery in shorter intervals compared to vaginal misoprostol(48,63,64). When used at a smaller dosage of

50 mcg, the duration of labor was longer and there was more need for oxytocin augmentation(65–67). Hence it was decided upon in our study to initiate the process of induction with a smaller dose of 50 mcg orally. The pharmacokinetics of oral misoprostol shows that it has a quick onset of action of approximately 8 minutes and the plasma levels peak in 30 minutes and it causes uterine tonus without causing uterine contractions unless repeated doses are given. The duration of action is approximately 2 hours and the action persists after that also(68). Misoprostol in titrated doses was found to be effective by Cheng et al but since hourly administration is not convenient we repeated the dose at 4 hourly intervals and also increased the subsequent dose to 100 mcg until regular uterine contractions occurred or the cervix became favorable(60).

In the present double blinded randomized controlled trial 778 patients were randomized. 389 were in each group. In the vaginal misoprostol group, 2 patients had no improvement in the cervical even after 3 doses and the process of induction was withheld and they were reinduced after 24 hours by the hospital protocol of vaginal misoprostol 25 mcg Q6h. They both delivered vaginally by instrument delivery. One patient in the vaginal misoprostol group was induced and was later found to have breech presentation and was taken up for cesarean section. Details of 9 patients were missing in this group and finally 380 patients were analyzed by intension to treat analysis.

In the oral misoprostol group, 1 patient had an unfavorable cervix even after 3 doses and she was reinduced by the hospital protocol and delivered by emergency cesarean section for failed induction. 2 other patients were induced out of the inclusion criteria, 1 for prelabor rupture of membranes and the other patient was in the course of labor detected to have breech presentation and delivered by cesarean section. 6 patient's

details were missing from this group and totally 383 patients from the oral misoprostol group were analyzed.

The mean age of the patients in the study was 25 years in both the groups and most of the patients were nulliparous (69.2% in vaginal misoprostol group and 71% in oral misoprostol group). The average body mass index was similar in both the arms (27.7 vs 28 kg/m<sup>2</sup>). Patients in both the groups belonged to a mean gestational age of 39 weeks.

The indication for induction was equally distributed and the commonest indication was for past dates (54.7% of the total). The other reasons were for gestational hypertension, gestational diabetes, intra-uterine growth restriction and any other obstetric or medical indication for induction at term. The demography of the patients and the indications for induction were equally distributed between both the groups confirming that randomization was followed.

The median Bishop score at the time of induction was 3 and the median number of doses of misoprostol used was 2 in both the arms. At the time of artificial rupture of membranes the median Bishop score was 5 in both the arms.

Oxytocin was required for augmentation in 80.3% of patients in the vaginal misoprostol group while only 73.4% of patients in the oral misoprostol group required it. This was found to be statistically significant with a p value of 0.026. This was the most significant finding of our study. This is in contrast to a similar study done by Colon et al where the same dose and dosing schedule of misoprostol was used but they had found no statistical significance between the two groups in terms of requirement of oxytocin(61).

There was no difference in the number of patients who achieved vaginal delivery within 24 hours or within 12 hours from the start of induction with a p value of 0.145 and 0.104 respectively. This shows that oral misoprostol at this dosing schedule was as effective as compared to vaginal misoprostol. The mean induction to delivery interval in minutes was  $973.76 \pm 322$  and  $933.88 \pm 317$  in the vaginal and oral misoprostol group respectively.

The incidence of hyperstimulation was also similar in both the groups (13.9% in the vaginal and 13.1% in the oral misoprostol group) but more number of patients in the oral misoprostol group required terbutaline though the difference was not statistically significant (3.2% in vaginal group and 5.5% in the oral group; p value 0.173). This rate of hyperstimulation is almost twice of the generally accepted incidence of hyperstimulation of 7% with vaginal administration.

There was no difference in uterine hyperstimulation with fetal heart rate changes between both the groups thereby showing that oral misoprostol is as safe as vaginal misoprostol (10.8% in the vaginal misoprostol group and 11.7% in the oral misoprostol group; p value 0.732)

Meconium stained amniotic fluid was seen in 12.4% of patients in the vaginal misoprostol group and 13.3% of patients in the oral misoprostol group. 6 patients in the oral misoprostol group and 1 patient from the vaginal misoprostol group developed chorioamnionitis and they were diagnosed based on intrapartum fever of more than  $100.4^{\circ}\text{F}$  either with fetal tachycardia or foul smelling liquor. The incidence of chorioamnionitis was not statistically significant.

The prevalence of maternal side effects like nausea, vomiting, diarrhea, fever and shivering were equal in both the arms. 7 patients in the entire study had serious outcomes like atonic postpartum hemorrhage and retained placenta which required manual removal. The incidence of rupture uterus with misoprostol in an unscarred uterus is about 0.2%(69). There have been anecdotal reports from some studies that the risk of uterine rupture with or without a previous scar on the uterus is higher with misoprostol than with any other inducing agent. There was no report of rupture uterus in this study.

The mean birth weight in each group was  $3075.39 \pm 383$  and  $3104.46 \pm 384$  in the vaginal misoprostol and the oral misoprostol group respectively. There was 1 neonate in the oral misoprostol group who had an Apgar score of  $<7$  at 5 minutes. Cord pH was less than 7.1 at birth in 1 baby from the vaginal misoprostol group and 2 babies in the oral misoprostol group.

Totally 21 babies were admitted to the nursery of which 10 were in the vaginal group and 11 were in the oral misoprostol group. 3 babies were diagnosed to have hypoxic ischemic encephalopathy stage 2, 4 babies were depressed at birth and kept in nursery for observation, 2 were suspected to have meconium aspiration syndrome and 2 were suspected to have sepsis. The reason for nursery admission of the other babies were for non-serious conditions like- transient tachypnea of the newborn, hypoglycemia, ambiguous genitalia, large for gestational age and low birth weight.

There was no statistically significant difference in the mode of delivery between the two groups. More than half of the patients in each group delivered vaginally and cesarean section rate was 21.1% in the vaginal misoprostol group and 24.8% in the oral



misoprostol group with a p value of 0.466. This finding is in contrast to the study done by Colon et al who showed a higher rate of cesarean section with vaginal misoprostol and lesser with oral misoprostol at the same dose and the cesarean section rate was statistically lesser in the oral group in their study (32.4% vs 19.4%; p value <0.05). The indication for which cesarean section was performed was similar in both the groups. Among the patients who had cesarean section, trace abnormality suggestive of non-reassuring fetal heart status was the common indication accounting for 12.1% in the vaginal misoprostol group and 13.6% in the oral misoprostol group.

Major concern with the use of misoprostol is possibility of rupture uterus and fetal asphyxia. Patients in this study were carefully monitored by continuous cardiotocography and majority of the patients had only 2 doses of misoprostol. Patients with a favorable cervix or with uterine contractions were not given the subsequent doses. The optimal safe dose of misoprostol is still a mystery. We chose this regimen as this was the safest effective dose that could be implemented in a busy labor room.

## **LIMITATIONS**

This study was performed in a tertiary level hospital which serves more than 12,000 patients in labor annually. Since we did not have dedicated research personnel, a few patients were randomized outside the inclusion criteria which could have been avoided. Inter-observer variability in detecting uterine hyperstimulation in such a large setting, interpretation of the cardiotocogram and the difference in opinion on the decision that would be taken, would have indirectly affected the incidence of hyperstimulation with or without fetal heart rate changes in this study. However this would be similar in both the arms.

Even though the protocol was to give misoprostol every 4 hours, the doses were delayed or stopped when either the cervix was favorable or with uterine contractions and the information on the actual gap between doses was not obtained.

## **CONCLUSION**

Our study found that oral misoprostol is as effective as vaginal misoprostol for cervical ripening and in achieving vaginal delivery within 24 hours. The rate of hyperstimulation and cesarean section was similar in both the groups. The need for oxytocin augmentation was less in the oral misoprostol group. Oral misoprostol had no increase in the incidence of maternal or neonatal outcomes compared to vaginal misoprostol.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
1	S.N	AGE	GRA	PA	LI	END	AB	MSB	FSB	DE	ECT	MO	GA	HT	WT	BSI	ARM	ARM	VD 24	VD 12	MO	IND	SMO	SMR	MAT	BW	AP	NIC
2	1	24	1	0	0	0	0	0	0	0	0	0	38	152	55	3	7	15	1	2	2	7	2	888	3	2530	2	1
3	2	31	3	2	2	0	0	0	0	0	0	0	41	157	65	4	13	0	1	2	2	7	2	888	1	3340	2	2
4	3	28	1	0	0	0	0	0	0	0	0	0	40	153	60	3	4	0	1	1	1	7	2	888	1	3240	2	2
5	4	20	2	1	0	1	0	0	0	0	0	0	40	152	75	3	9	0	1	2	1	7	2	888	0	2360	2	2
6	5	26	3	1	1	0	1	0	0	0	0	0	40	150	79	4	8	0	1	2	1	7	2	888	0	3100	2	2
7	6	30	2	1	1	0	0	0	0	0	0	0	40	149	87	3	4	0	1	1	1	7	2	888	0	3720	2	2
8	7	28	1	0	0	0	0	0	0	0	0	0	38	156	55	3	10	45	3	3	3	1	2	888	0	2680	2	2
9	8	23	1	0	0	0	0	0	0	0	0	0	41	160	67	3	8	45	2	1	1	7	2	888	0	3220	2	2
10	9	28	1	0	0	0	0	0	0	0	0	0	41	157	72	3	8	10	2	2	1	7	2	888	0	3840	2	2
11	10	22	1	0	0	0	0	0	0	0	0	0	40	157	57	4	8	40	1	2	1	7	2	888	0	2970	2	2
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16	15	24	1	0	0	0	0	0	0	0	0	0	41	163	83	4	8	0	1	2	2	7	2	888	1	3460	2	2
17	16	36	4	1	1	0	2	0	0	0	0	0	37	156	70	3	9	10	1	1	1	7	2	888	0	3380	2	2
18	17	22	1	0	0	0	0	0	0	0	0	0	41	158	73	2	8	45	1	2	1	7	2	888	0	2870	2	2
19	18	32	2	1	1	0	0	0	0	0	0	0	39	162	71	3	8	0	1	1	1	7	2	888	0	3420	2	2
20	19	24	1	0	0	0	0	0	0	0	0	0	41	146	52	2	10	0	3	3	3	6	1	1	3	3260	2	2
21	20	22	2	0	0	0	1	0	0	0	0	0	40	156	71	2	11	35	2	2	2	7	2	888	0	3000	2	2
22	21	30	1	0	0	0	0	0	0	0	0	0	40	152	75	2	10	35	3	3	3	1	2	888	0	3020	2	2
23	22	23	1	0	0	0	0	0	0	0	0	0	38	162	87	4	4	10	1	2	1	7	2	888	1	3580	2	2
24	23	27	2	1	1	0	0	0	0	0	0	0	38	155	79	4	8	50	1	2	1	7	2	888	0	3150	2	2
25	24	30	3	1	1	0	1	0	0	0	0	0	38	158	58	4	8	36	1	1	1	7	2	888	0	2740	2	1
26	25	20	1	0	0	0	0	0	0	0	0	0	41	155	50	3	8	35	1	2	1	7	2	888	0	2690	2	2
27	26	32	1	0	0	0	0	0	0	0	0	0	38	165	80	3	12	0	1	2	1	7	2	888	1	3170	2	2
28	27	21	3	2	2	0	0	0	0	0	0	0	40	156	62	3	12	0	1	2	1	7	2	888	0	3100	2	2
29	28	34	2	0	0	0	1	0	0	0	0	0	40	152	52	3	8	0	3	3	3	1	2	888	0	2980	2	2
30	29	25	2	0	0	0	1	0	0	0	0	0	40	160	51	2	6	50	3	3	3	1	2	888	0	3440	2	2
31	30	25	1	0	0	0	0	0	0	0	0	0	40	158	70	3	8	10	3	3	3	1	2	888	1	3680	2	2
32	31	26	1	0	0	0	0	0	0	0	0	0	41	155	71	1	8	20	1	2	2	8	2	888	0	3710	2	2
33	32	37	3	2	2	0	0	0	0	0	0	0	38	159	66	3	8	35	1	1	1	7	2	888	0	2940	2	2
34	33	30	1	0	0	0	0	0	0	0	0	0	41	150	61	3	8	0	1	1	1	7	2	888	0	3090	2	2
35	34	26	1	0	0	0	0	0	0	0	0	0	40	164	71	4	8	0	1	1	2	7	2	888	0	2850	2	2
36	35	25	1	0	0	0	0	0	0	0	0	0	39	149	65	2	12	10	2	2	2	1	2	888	0	3290	2	2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
37	36	20	3	2	1	1	0	0	0	1	0	0	41	152	50	4	8	45	1	2	1	7	2	888	0	3180	2	2
38	37	24	1	0	0	0	0	0	0	0	0	0	39	168	67	5	8	0	1	1	2	1	2	888	0	3090	2	2
39	38	21	1	0	0	0	0	0	0	0	0	0	40	154	68	5	8	20	1	2	1	7	2	888	0	2990	2	2
40	39	27	1	0	0	0	0	0	0	0	0	0	40	169	97	5	8	0	1	1	1	7	2	888	0	3250	2	2
41	40	30	1	0	0	0	0	0	0	0	0	0	38	163	79	2	9	0	1	2	2	1	2	888	0	3150	2	1
42	41	24	2	1	1	0	0	0	0	0	0	0	40	150	64	1	8	0	1	1	1	7	2	888	0	3250	2	2
43	42	21	1	0	0	0	0	0	0	0	0	0	40	167	82	4	10	0	1	2	1	7	2	888	0	2940	2	2
44	43	21	1	0	0	0	0	0	0	0	0	0	40	155	79	3	888	888	888	888	2	7	2	888	0	3380	2	2
45	44	34	1	0	0	0	0	0	0	0	0	0	38	158	67	4	8	10	3	3	3	2	2	888	3	3380	2	2
46	45	23	1	0	0	0	0	0	0	0	0	0	40	160	63	4	8	25	1	2	1	7	2	888	0	3180	2	2
47	46	27	1	0	0	0	0	0	0	0	0	0	38	154	73	3	11	45	1	2	3	8	2	888	0	3200	2	2
48	47	28	2	0	0	0	1	0	0	0	0	0	39	150	59	4	4	0	1	2	1	7	2	888	1	2540	2	2
49	48	31	4	1	1	0	2	0	0	0	0	0	41	160	78	3	11	0	1	2	1	7	2	888	0	3470	2	2
50	49	26	1	0	0	0	0	0	0	0	0	0	41	152	58	4	4	20	1	1	1	7	2	888	0	2670	2	2
51	50	24	4	0	0	0	3	0	0	0	0	0	40	156	63	3	13	50	3	3	3	4	2	888	1	3840	2	2
52	51	25	1	0	0	0	0	0	0	0	0	0	40	170	61	3	8	30	1	1	1	7	2	888	0	2780	2	2
53	52	30	2	1	1	0	0	0	0	0	0	0	41	155	78	4	9	45	1	1	1	7	2	888	0	3580	2	2
54	53	27	1	0	0	0	0	0	0	0	0	0	37	157	73	4	9	0	1	1	2	2	2	888	0	2880	2	2
55	54	26	2	1	1	0	0	0	0	0	0	0	41	170	74	4	5	30	1	1	1	7	2	888	0	3790	2	2
56	55	23	1	0	0	0	0	0	0	0	0	0	41	153	60	4	13	0	2	1	2	9	2	888	0	3150	2	2
57	56	24	2	1	1	0	0	0	0	0	0	0	41	156	63	4	8	15	1	1	1	7	2	888	0	3240	2	2
58	57	28	1	0	0	0	0	0	0	0	0	0	39	148	57	4	18	30	2	2	2	9	2	888	0	2770	2	2
59	58	24	2	0	0	0	1	0	0	0	0	0	40	153	65	1	8	15	1	2	1	7	2	888	0	3250	2	2
60	59	22	1	0	0	0	0	0	0	0	0	0	39	167	75	2	12	15	2	2	1	7	2	888	1	3890	2	2
61	60	29	2	1	1	0	0	0	0	0	0	0	41	159	76	5	8	0	1	1	1	7	2	888	0	3340	2	2
62	61	26	2	0	0	0	1	0	0	0	0	0	38	160	69	4	3	48	1	1	1	7	2	888	0	1490	2	1
63	62	27	1	0	0	0	0	0	0	0	0	0	38	155	78	4	12	20	3	3	3	3	2	888	0	3680	2	2
64	63	22	3	1	1	0	0	0	0	0	0	1	41	146	45	3	10	0	1	2	1	7	2	888	1	3340	2	2
65	64	23	1	0	0	0	0	0	0	0	0	0	41	157	71	4	12	0	1	2	1	7	2	888	0	3040	2	2
66	65	28	1	0	0	0	0	0	0	0	0	0	40	150	64	4	8	30	1	1	1	7	2	888	0	2630	2	2
67	66	26	1	0	0	0	0	0	0	0	0	0	39	159	85	4	8	0	1	2	2	9	2	888	3	2700	2	2
68	67	30	1	0	0	0	0	0	0	0	0	0	40	150	64	4	8	40	1	2	1	7	2	888	0	2650	2	2
69	68	24	2	1	1	0	0	0	0	0	0	0	40	156	56	4	4	0	1	1	1	7	2	888	1	3300	2	2
70	69	28	1	0	0	0	0	0	0	0	0	0	39	158	69	3	8	35	1	2	2	1	2	888	0	3010	2	2
71	70	26	1	0	0	0	0	0	0	0	0	0	40	154	62	3	4	45	3	3	3	4	2	888	0	3780	2	2
72	71	21	3	1	1	0	1	0	0	0	0	0	40	150	78	3	12	0	3	3	3	1	2	888	0	3120	2	2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	
73	72	24	1	0	0	0	0	0	0	0	0	0	41	165	96	2	15	10	3	3	3	8	2	888	0	3380	2	2	
74	73	28	1	0	0	0	0	0	0	0	0	0	38	165	95	4	14	0	1	2	2	1	2	888	0	2610	2	2	
75	74	26	1	0	0	0	0	0	0	0	0	0	41	154	75	2	5	20	1	1	1	7	2	888	1	3430	2	2	
76	75	25	1	0	0	0	0	0	0	0	0	0	41	152	53	2	18	0	2	2	1	7	2	888	2	2800	2	2	
77	76	26	3	2	2	0	0	0	0	0	0	0	40	165	87	4	13	15	1	2	1	7	2	888	0	3220	2	2	
78	77	26	3	2	2	0	0	0	0	0	0	0	41	150	60	3	4	30	1	1	1	7	2	888	0	3270	2	2	
79	78	21	2	1	1	0	0	0	0	0	0	0	41	158	77	4	8	0	1	1	1	7	2	888	0	3080	2	2	
80	79	24	1	0	0	0	0	0	0	0	0	0	40	156	67	3	9	0	2	2	2	1	2	888	1	3400	2	2	
81	80	23	3	1	1	0	1	0	0	0	0	0	41	151	54	3	8	0	1	1	1	7	2	888	0	3120	2	2	
82	81	28	2	1	1	0	0	0	0	0	0	0	41	155	57	3	8	15	1	2	1	7	2	888	0	3140	2	2	
83	82	21	1	0	0	0	0	0	0	0	0	0	40	156	67	5	10	25	1	2	2	1	2	888	0	2840	2	2	
84	83	18	2	0	0	0	1	0	0	0	0	0	41	159	81	3	8	40	3	3	3	1	2	888	3	3160	2	2	
85	84	20	1	0	0	0	0	0	0	0	0	0	39	157	67	3	8	45	1	2	1	7	1	2	0	3350	2	2	
86	85	32	1	0	0	0	0	0	0	0	0	0	41	175	88	3	13	10	3	3	3	3	2	888	0	3160	2	2	
87	86	28	2	0	0	0	1	0	0	0	0	0	38	161	75	5	10	0	1	2	1	7	2	888	0	2750	2	2	
88	87	26	1	0	0	0	0	0	0	0	0	0	39	147	76	4	13	30	3	3	3	4	2	888	3	3640	2	2	
89	88	27	2	1	1	0	0	0	0	0	0	0	39	164	67	6	8	15	1	1	1	7	2	888	0	3040	2	2	
90	89	25	1	0	0	0	0	0	0	0	0	0	39	153	83	5	12	20	3	3	3	4	2	888	1	3960	2	2	
91	90	26	6	2	1	0	2	1	0	0	0	0	38	146	61	4	8	0	1	1	1	7	2	888	0	3160	2	2	
92	91	29	3	2	1	0	0	0	0	1	0	0	40	157	65	5	12	4	1	2	1	7	2	888	0	3150	2	2	
93	92	20	1	0	0	0	0	0	0	0	0	0	40	156	55	5	8	0	1	2	2	7	2	888	0	2900	2	2	
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95	94	26	1	0	0	0	0	0	0	0	0	0	38	163	80	4	11	40	1	2	1	7	2	888	0	2540	2	2	
96	95	23	1	0	0	0	0	0	0	0	0	0	41	162	64	3	12	0	1	2	1	7	2	888	1	3600	2	2	
97	96	23	1	0	0	0	0	0	0	0	0	0	39	150	74	3	888	19/2	6	2	2	2	7	2	888	0	2890	2	2
98	97	27	2	1	1	0	0	0	0	0	0	0	40	159	73	3	13	0	1	2	1	7	2	888	0	4160	2	2	
99	98	23	1	0	0	0	0	0	0	0	0	0	40	155	77	3	14	25	1	2	1	7	2	888	0	2860	2	2	
100	99	23	1	0	0	0	0	0	0	0	0	0	40	155	83	2	13	12	3	3	3	6	2	888	0	3420	2	2	
101	100	24	1	0	0	0	0	0	0	0	0	0	41	155	72	3	13	0	3	3	3	3	2	888	0	3420	2	2	
102	101	22	1	0	0	0	0	0	0	0	0	0	41	156	66	3	16	40	3	3	3	6	2	888	0	3220	2	2	
103	102	31	1	0	0	0	0	0	0	0	0	0	38	168	80	4	12	30	1	2	2	1	2	888	0	2980	2	2	
104	103	26	1	0	0	0	0	0	0	0	0	0	40	163	66	1	17	30	2	2	1	7	2	888	0	3350	2	2	
105	104	27	3	2	2	0	0	0	0	0	0	0	38	152	76	4	6	28	1	1	1	7	2	888	0	3350	2	2	
106	105	21	2	1	1	0	0	0	0	0	0	0	41	164	88	4	7	45	1	2	1	7	2	888	0	3200	2	2	
107	106	21	1	0	0	0	0	0	0	0	0	0	41	156	69	4	7	45	1	1	1	7	2	888	0	3050	2	2	
108	107	24	3	1	0	0	1	0	1	0	0	0	40	166	66	3	9	15	1	2	1	7	2	888	0	3250	2	2	

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
109	108	23	1	0	0	0	0	0	0	0	0	0	39	174	92	4	12	0	3	3	3	6	2	888	0	3320	2	2
110	109	27	1	0	0	0	0	0	0	0	0	0	41	152	60	4	8	0	1	2	1	1	2	888	0	3250	2	2
111	110	27	1	0	0	0	0	0	0	0	0	0	37	152	76	3	13	0	3	3	3	6	2	888	0	2940	2	2
112	111	34	2	1	1	0	0	0	0	0	0	0	38	153	70	6	4	30	1	1	1	7	2	888	0	3160	2	2
113	112	23	1	0	0	0	0	0	0	0	0	0	40	158	77	4	14	0	1	2	1	7	2	888	0	3680	2	2
114	113	24	2	0	0	0	1	0	0	0	0	0	41	152	68	3	11	0	1	2	2	1	2	888	0	3430	2	2
115	114	25	5	2	2	0	2	0	0	0	0	0	40	154	75	5	11	25	1	2	1	7	2	888	0	3500	2	2
116	115	22	3	0	0	0	2	0	0	0	0	0	38	158	83	2	12	35	3	3	3	3	2	888	1	3240	2	2
117	116	37	4	1	1	0	2	0	0	0	0	0	40	151	82	4	5	0	1	1	1	7	2	888	0	3130	2	2
118	117	25	2	1	1	0	0	0	0	0	0	0	40	154	73	5	5	30	1	1	1	7	2	888	0	3500	2	2
119	118	21	1	0	0	0	0	0	0	0	0	0	40	155	76	1	12	0	1	2	1	7	2	888	1	2450	2	2
120	119	23	1	0	0	0	0	0	0	0	0	0	40	166	69	2	8	0	1	2	1	7	2	888	0	3360	2	2
121	120	21	1	0	0	0	0	0	0	0	0	0	40	154	69	3	8	10	3	3	3	1	2	888	0	2860	2	2
122	121	25	1	0	0	0	0	0	0	0	0	0	38	153	59	3	16	15	3	3	3	1	2	888	0	2660	2	2
123	122	25	1	0	0	0	0	0	0	0	0	0	41	149	64	1	4	0	3	3	3	1	2	888	0	3080	2	2
124	123	28	1	0	0	0	0	0	0	0	0	0	40	159	60	2	19	0	2	2	1	7	2	888	0	2660	2	2
125	124	18	2	0	0	0	1	0	0	0	0	0	40	164	71	3	8	0	3	3	3	1	2	888	0	2390	2	2
126	125	23	2	1	1	0	0	0	0	0	0	0	41	151	56	5	8	15	1	1	1	7	2	888	1	3220	2	2
127	126	23	1	0	0	0	0	0	0	0	0	0	40	155	74	1	14	0	3	3	3	3	2	888	1	3500	2	2
128	127	31	2	1	1	0	0	0	0	0	0	0	39	150	80	4	12	15	1	2	1	7	2	888	0	3310	2	2
129	128	26	1	0	0	0	0	0	0	0	0	0	41	154	52	2	5	50	3	3	3	1	2	888	0	2780	2	2
130	129	24	1	0	0	0	0	0	0	0	0	0	40	151	53	5	9	30	1	2	1	7	2	888	0	3500	2	2
131	130	31	1	0	0	0	0	0	0	0	0	0	40	166	74	3	12	0	1	2	1	7	2	888	0	2780	2	2
132	131	24	1	0	0	0	0	0	0	0	0	0	38	148	73	0	0	0	3	3	3	6	2	888	0	2680	2	2
133	132	23	1	0	0	0	0	0	0	0	0	0	38	134	69	4	8	0	1	2	2	1	2	888	1	3160	2	2
134	135	17	1	0	0	0	0	0	0	0	0	0	40	157	58	3	12	0	1	2	1	7	2	888	1	3040	2	2
135	134	28	2	1	1	0	0	0	0	0	0	0	40	155	72	4	12	15	1	2	1	7	2	888	1	3080	2	2
136	135	24	2	1	1	0	0	0	0	0	0	0	41	161	79	6	8	40	1	2	1	7	2	888	0	3480	2	2
137	136	29	1	0	0	0	0	0	0	0	0	0	40	155	51	2	12	50	3	3	3	6	2	888	2	2740	2	2
138	137	27	1	0	0	0	0	0	0	0	0	0	40	158	81	2	13	50	3	3	3	1	2	888	0	3270	2	2
139	138	25	1	0	0	0	0	0	0	0	0	0	41	152	83	3	12	35	1	2	1	7	2	888	0	3220	2	2
140	139	19	1	0	0	0	0	0	0	0	0	0	39	146	46	3	13	25	1	2	1	7	2	888	0	2900	2	2
141	140	24	1	0	0	0	0	0	0	0	0	0	40	150	52	4	5	45	3	3	3	6	2	888	0	3080	2	2
142	141	24	2	1	1	0	0	0	0	0	0	0	41	163	84	3	10	20	1	2	1	7	2	888	0	3760	2	2
143	142	29	1	0	0	0	0	0	0	0	0	0	40	157	69	1	17	20	2	2	1	7	2	888	0	3460	2	2
144	143	29	1	0	0	0	0	0	0	0	0	0	40	161	60	4	8	40	1	2	2	7	2	888	0	3500	2	2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
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146	145	33	3	0	0	0	2	0	0	0	0	0	40	169	76	3	9	50	3	3	3	3	2	888	1	3440	2	2
147	146	17	1	0	0	0	0	0	0	0	0	0	38	158	83	2	14	55	2	2	1	7	2	888	0	2800	2	2
148	147	24	1	0	0	0	0	0	0	0	0	0	41	155	68	3	12	20	1	2	1	7	2	888	0	3730	2	2
149	148	21	1	0	0	0	0	0	0	0	0	0	40	165	80	3	5	55	1	2	1	7	2	888	3	3180	2	2
150	149	25	1	0	0	0	0	0	0	0	0	0	41	157	69	3	15	10	1	2	2	1	2	888	0	3150	2	2
151	150	18	1	0	0	0	0	0	0	0	0	0	41	151	63	3	9	5	3	3	3	1	2	888	0	3100	2	2
152	151	27	3	2	1	0	0	1	0	0	0	0	38	152	60	3	12	30	1	2	1	7	2	888	0	2640	2	2
153	152	28	1	0	0	0	0	0	0	0	0	0	39	150	94	4	5	50	1	2	1	7	2	888	0	2770	2	2
154	153	23	2	0	0	0	1	0	0	0	0	0	40	160	65	3	9	0	1	2	2	1	2	888	0	3250	2	2
155	154	26	2	0	0	0	1	0	0	0	0	0	41	152	66	3	12	25	3	3	3	6	2	888	0	3500	2	2
156	155	34	3	1	1	0	1	0	0	0	0	0	41	152	71	3	8	0	1	2	2	9	2	888	0	4130	2	1
157	156	36	1	0	0	0	0	0	0	0	0	0	38	162	91	2	15	0	3	3	3	6	2	888	0	3700	2	2
158	157	20	1	0	0	0	0	0	0	0	0	0	39	164	83	2	15	20	1	2	2	1	2	888	0	3110	2	2
159	158	26	2	1	1	0	0	0	0	0	0	0	39	151	71	4	6	50	1	1	1	7	2	888	0	2760	2	2
160	159	27	2	1	1	0	0	0	0	0	0	0	39	168	98	5	10	50	1	2	1	7	2	888	0	3470	2	2
161	160	22	1	0	0	0	0	0	0	0	0	0	40	167	64	2	5	25	1	1	1	7	2	888	0	3500	2	2
162	161	25	1	0	0	0	0	0	0	0	0	0	40	158	83	1	14	12	1	2	1	7	2	888	0	3050	2	2
163	162	27	2	1	1	0	0	0	0	0	0	0	41	152	65	3	14	35	1	2	1	7	2	888	0	3150	2	2
164	163	24	1	0	0	0	0	0	0	0	0	0	41	172	88	4	14	0	3	3	3	6	2	888	0	3300	2	2
165	164	23	1	0	0	0	0	0	0	0	0	0	40	157	63	2	13	15	1	2	2	1	2	888	0	2620	2	2
166	165	19	1	0	0	0	0	0	0	0	0	0	40	153	59	3	8	0	1	2	1	7	2	888	0	2771	2	2
167	166	21	1	0	0	0	0	0	0	0	0	0	40	152	40	4	7	30	1	1	1	7	2	888	0	3450	2	2
168	167	31	3	2	2	0	0	0	0	0	0	0	41	152	66	5	6	0	1	1	1	7	2	888	0	3540	2	2
169	168	25	1	0	0	0	0	0	0	0	0	0	38	164	104	3	14	35	1	2	1	7	2	888	0	3360	2	2
170	169	23	1	0	0	0	0	0	0	0	0	0	40	140	50	3	12	35	2	2	2	7	2	888	0	3080	2	1
171	170	21	1	0	0	0	0	0	0	0	0	0	40	156	86	3	11	10	3	3	3	1	2	888	0	2880	2	2
172	171	27	1	0	0	0	0	0	0	0	0	0	41	157	64	3	11	0	1	2	1	7	2	888	1	3400	2	2
173	172	22	2	1	0	0	0	1	0	0	0	0	39	163	70	5	17	20	3	3	3	3	2	888	0	3320	2	2
174	173	28	1	0	0	0	0	0	0	0	0	0	41	158	90	3	16	35	2	2	2	1	2	888	0	3130	2	2
175	174	21	2	1	1	0	0	0	0	0	0	0	39	156	83	3	13	30	1	2	1	7	2	888	0	3860	2	2
176	175	23	1	0	0	0	0	0	0	0	0	0	40	156	80	5	15	45	1	2	1	7	2	888	0	3500	2	2
177	176	26	1	0	0	0	0	0	0	0	0	0	40	158	72	3	12	25	3	3	3	6	2	888	0	2920	2	2
178	177	25	4	1	1	0	2	0	0	0	0	0	39	165	73	3	10	22	1	1	1	7	2	888	0	2840	2	2
179	178	34	4	2	2	0	1	0	0	0	0	0	40	160	75	3	12	0	1	2	1	7	2	888	0	3080	2	2
180	179	22	2	0	0	0	1	0	0	0	0	0	38	149	70	3	10	45	1	2	2	7	2	888	0	3550	2	2



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
181	180	27	1	0	0	0	0	0	0	0	0	0	40	160	63	3	14	45	1	2	1	7	2	888	0	3140	2	2
182	181	25	1	0	0	0	0	0	0	0	0	0	41	169	88	2	15	0	2	2	1	7	2	888	0	3950	2	2
183	182	23	1	0	0	0	0	0	0	0	0	0	39	159	73	3	13	35	3	3	3	6	2	888	0	2920	2	2
184	183	25	2	1	1	0	0	0	0	0	0	0	38	151	44	3	13	25	1	2	1	7	2	888	0	2280	2	2
185	184	21	1	0	0	0	0	0	0	0	0	0	40	153	55	3	15	0	1	2	1	7	2	888	0	3010	2	2
186	185	27	2	1	1	0	0	0	0	0	0	0	39	159	68	3	11	30	1	2	1	7	2	888	0	3400	2	2
187	186	25	1	0	0	0	0	0	0	0	0	0	41	155	63	3	12	25	3	3	3	1	2	888	0	3600	2	2
188	187	26	1	0	0	0	0	0	0	0	0	0	39	153	81	3	4	0	1	2	2	1	2	888	1	3600	2	2
189	188	21	2	0	0	0	1	0	0	0	0	0	40	162	62	3	4	30	1	2	2	1	2	888	0	3040	2	2
190	189	26	2	0	0	0	1	0	0	0	0	0	39	164	61	3	14	10	1	2	1	7	2	888	0	2730	2	2
191	190	25	1	0	0	0	0	0	0	0	0	0	40	160	72	2	13	45	1	2	1	7	2	888	3	2780	2	2
192	191	28	1	0	0	0	0	0	0	0	0	0	40	153	83	3	15	0	2	2	2	1	2	888	1	3020	2	2
193	192	23	1	0	0	0	0	0	0	0	0	0	40	156	76	2	13	45	2	2	1	7	2	888	0	3920	2	2
194	193	26	1	0	0	0	0	0	0	0	0	0	40	155	68	3	16	10	1	2	1	7	2	888	0	3140	2	2
195	194	21	1	0	0	0	0	0	0	0	0	0	40	140	50	5	13	20	1	2	2	1	2	888	0	2700	2	2
196	195	23	4	2	1	0	1	1	0	0	0	0	39	162	87	3	12	15	1	2	1	7	2	888	0	3450	2	2
197	196	22	1	0	0	0	0	0	0	0	0	0	40	160	60	4	10	20	1	2	1	7	2	888	0	3130	2	2
198	197	22	1	0	0	0	0	0	0	0	0	0	39	150	88	3	10	0	1	2	1	7	2	888	0	2680	2	2
199	198	28	1	0	0	0	0	0	0	0	0	0	41	157	62	3	14	15	2	2	2	1	2	888	0	3380	2	2
200	199	23	1	0	0	0	0	0	0	0	0	0	40	158	72	3	11	30	1	2	1	7	2	888	0	3240	2	2
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202	201	24	1	0	0	0	0	0	0	0	0	0	41	162	80	3	14	50	1	2	2	1	2	888	0	3200	2	2
203	202	29	1	0	0	0	0	0	0	0	0	0	41	158	58	1	13	0	1	2	1	7	2	888	0	3210	2	2
204	203	34	3	2	2	0	0	0	0	0	0	0	39	142	54	3	7	34	1	1	1	7	2	888	0	2200	2	2
205	204	25	3	1	1	0	1	0	0	0	0	0	41	147	52	5	8	30	1	1	1	7	2	888	0	3520	2	2
206	205	23	2	1	1	0	0	0	0	0	0	0	40	164	63	5	6	30	1	1	1	7	2	888	0	2660	2	2
207	206	29	1	0	0	0	0	0	0	0	0	0	40	151	86	4	16	15	3	3	3	1	2	888	0	2980	2	2
208	207	25	2	1	0	0	0	0	1	0	0	0	39	156	85	5	9	0	1	1	1	7	2	888	0	2520	2	2
209	208	28	1	0	0	0	0	0	0	0	0	0	41	156	81	3	12	0	3	3	3	6	2	888	0	2940	2	2
210	209																											
211	210	21	1	0	0	0	0	0	0	0	0	0	41	155	68	3	8	30	1	2	1	7	2	888	0	2900	2	2
212	211	33	2	0	0	0	1	0	0	0	0	0	39	156	75	3	17	30	3	3	3	1	2	888	0	2920	2	2
213	212	20	1	0	0	0	0	0	0	0	0	0	41	159	63	4	12	50	1	2	1	7	2	888	1	3160	2	2
214	213	31	3	1	1	0	0	0	0	0	1	0	40	147	76	5	8	0	1	1	1	7	2	888	0	4040	2	2
215	214																											
216	215	21	1	0	0	0	0	0	0	0	0	0	40	155	71	4	12	30	1	2	1	7	2	888	0	2660	2	2

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217	216	27	2	1	1	0	0	0	0	0	0	0	40	151	81	5	12	15	1	2	1	7	2	888	0	3260	2	2
218	217	29	2	1	1	0	0	0	0	0	0	0	41	163	68	3	4	5	1	1	1	7	2	888	0	3130	2	2
219	218	23	3	2	1	1	0	0	0	0	0	0	40	165	57	4	13	15	1	2	1	7	2	888	0	3580	2	2
220	219	27	1	0	0	0	0	0	0	0	0	0	41	165	66	4	13	15	1	2	2	7	2	888	0	3460	2	2
221	220	22	1	0	0	0	0	0	0	0	0	0	40	145	57	5	8	30	1	2	1	7	2	888	0	2800	2	2
222	221	28	1	0	0	0	0	0	0	0	0	0	41	157	55	5	8	30	2	2	1	7	2	888	1	3210	2	2
223	222	35	2	1	1	0	0	0	0	0	0	0	40	149	52	3	4	0	1	1	1	7	2	888	0	3080	2	2
224	223	22	2	1	1	0	0	0	0	0	0	0	41	161	50	4	12	50	1	2	1	7	2	888	0	3100	2	2
225	224	20	1	0	0	0	0	0	0	0	0	0	41	155	61	4	10	5	3	3	3	3	2	888	0	3940	2	1
226	225	20	1	0	0	0	0	0	0	0	0	0	41	154	52	4	17	10	3	3	3	6	2	888	3	3220	2	2
227	226	27	1	0	0	0	0	0	0	0	0	0	42	147	68	4	17	10	3	3	3	6	2	888	0	3500	2	2
228	227	29	1	0	0	0	0	0	0	0	0	0	40	151	64	3	12	45	1	2	1	7	2	888	1	3150	2	2
229	228	24	2	1	1	0	0	0	0	0	0	0	40	156	60	3	15	45	1	2	1	7	2	888	1	2780	2	2
230	229	29	2	1	1	0	0	0	0	0	0	0	40	152	45	4	12	45	1	2	1	7	2	888	0	2780	2	2
231	230	21	1	0	0	0	0	0	0	0	0	0	41	156	77	2	16	30	1	2	2	7	2	888	0	3640	2	2
232	231	30	2	1	1	0	0	0	0	0	0	0	39	158	90	2	15	25	1	2	1	7	2	888	0	2500	2	2
233	232	35	2	0	0	0	1	0	0	0	0	0	39	150	65	3	13	0	1	2	1	7	2	888	0	2720	2	2
234	233	31	1	0	0	0	0	0	0	0	0	0	40	161	59	5	12	45	1	2	1	7	2	888	0	3120	2	2
235	234	18	1	0	0	0	0	0	0	0	0	0	41	163	61	3	14	15	1	2	1	7	2	888	0	2820	2	2
236	235	23	1	0	0	0	0	0	0	0	0	0	40	169	75	2	4	20	1	2	1	7	2	888	0	2830	2	2
237	236	21	2	1	1	0	0	0	0	0	0	0	41	150	77	4	15	20	1	2	1	7	2	888	0	3220	2	2
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239	238	31	2	1	0	0	0	0	1	0	0	0	37	148	60	4	9	15	1	2	1	7	2	888	0	2300	2	2
240	239	29	1	0	0	0	0	0	0	0	0	0	40	164	74	4	9	10	2	2	2	7	2	888	0	3400	2	2
241	240	20	1	0	0	0	0	0	0	0	0	0	41	145	55	3	12	30	1	2	1	7	2	888	0	2760	2	2
242	241	23	2	1	1	0	0	0	0	0	0	0	40	153	62	4	12	48	1	2	1	7	2	888	0	3180	2	2
243	242	19	1	0	0	0	0	0	0	0	0	0	40	158	50	3	14	30	1	2	1	7	2	888	0	2600	2	2
244	243	29	1	0	0	0	0	0	0	0	0	0	39	165	113	3	15	0	1	2	2	1	2	888	0	2780	2	2
245	244	35	1	0	0	0	0	0	0	0	0	0	37	149	41	3	14	20	3	3	3	1	2	888	0	2640	2	2
246	245	27	1	0	0	0	0	0	0	0	0	0	40	156	94	3	8	10	1	2	1	7	2	888	0	3910	2	2
247	246	26	1	0	0	0	0	0	0	0	0	0	40	152	59	3	11	0	1	2	2	7	2	888	0	2630	2	2
248	247	27	3	1	1	0	1	0	0	0	0	0	40	148	76	3	8	0	1	1	1	7	2	888	0	3280	2	2
249	248	31	4	0	0	0	3	0	0	0	0	0	38	149	66	3	8	0	1	2	2	7	2	888	0	2540	2	2
250	249	28	6	1	1	0	4	0	0	0	0	0	39	156	71	3	9	50	1	1	1	7	2	888	0	2630	2	2
251	250	30	1	0	0	0	0	0	0	0	0	0	41	156	80	3	13	25	2	2	2	7	2	888	0	3210	2	2
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
253	252	24	1	0	0	0	0	0	0	0	0	0	40	146	55	2	4	30	3	3	3	6	2	888	1	2820	2	2
254	253	20	1	0	0	0	0	0	0	0	0	0	40	164	73	3	12	30	1	2	1	7	2	888	0	3220	2	2
255	254	28	2	1	1	0	0	0	0	0	0	0	41	159	59	4	11	6	1	1	1	7	2	888	1	3140	2	2
256	255	26	1	0	0	0	0	0	0	0	0	0	41	160	67	3	12	0	1	2	1	7	2	888	0	2660	2	2
257	256	28	2	1	1	0	0	0	0	0	0	0	40	160	98	5	9	15	1	1	1	7	2	888	0	4310	2	1
258	257	24	1	0	0	0	0	0	0	0	0	0	40	154	90	3	13	10	2	2	2	7	2	888	0	3260	2	2
259	258	24	2	1	1	0	0	0	0	0	0	0	40	157	82	3	9	0	1	2	1	7	2	888	0	3520	2	2
260	259	27	1	0	0	0	0	0	0	0	0	0	41	160	63	5	8	25	1	1	1	7	2	888	0	2830	2	2
261	260	28	1	0	0	0	0	0	0	0	0	0	41	157	58	4	8	20	1	2	2	7	2	888	0	3380	2	2
262	261	23	2	1	1	0	0	0	0	0	0	0	39	157	70	4	8	5	1	2	1	7	2	888	0	2880	2	2
263	262	20	1	0	0	0	0	0	0	0	0	0	40	165	70	3	12	20	1	2	1	7	2	888	0	2960	2	2
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265	264	21	1	0	0	0	0	0	0	0	0	0	40	158	71	3	12	30	3	3	3	1	2	888	0	3000	2	2
266	265	31	1	0	0	0	0	0	0	0	0	0	41	168	72	2	12	45	1	2	2	7	2	888	0	3270	2	2
267	266	20	1	0	0	0	0	0	0	0	0	0	40	157	74	2	12	50	3	3	3	1	2	888	0	3220	2	2
268	267	31	3	2	1	0	0	0	1	0	0	0	39	152	80	4	13	30	1	2	1	7	2	888	0	3250	2	2
269	268	19	2	1	1	0	0	0	0	1	0	0	40	166	60	3	13	20	1	2	1	7	2	888	0	3030	2	2
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272	271	31	3	2	2	0	0	0	0	0	0	0	41	148	61	3	8	5	1	1	1	7	2	888	0	2940	2	2
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275	274	21	1	0	0	0	0	0	0	0	0	0	41	150	71	5	12	5	3	3	3	6	2	888	0	3180	2	2
276	275	32	1	0	0	0	0	0	0	0	0	0	39	152	72	2	9	5	3	3	3	1	2	888	0	2900	2	2
277	276	28	2	0	0	0	1	0	0	0	0	0	39	156	57	4	13	0	1	2	1	7	2	888	1	2880	2	2
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279	278	26	1	0	0	0	0	0	0	0	0	0	41	166	71	2	4	15	3	3	3	1	2	888	0	3580	2	2
280	279	25	4	1	1	0	2	0	0	0	0	0	40	154	71	2	13	15	1	2	1	7	2	888	0	3400	2	2
281	280	20	1	0	0	0	0	0	0	0	0	0	41	167	55	4	11	30	1	2	1	7	2	888	0	2900	2	2
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287	286	22	1	0	0	0	0	0	0	0	0	0	41	162	82	5	4	0	1	2	2	7	2	888	0	3220	2	2
288	287	28	2	1	1	0	0	0	0	0	0	0	41	155	64	3	11	15	2	2	2	7	1	1	0	3820	2	2

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290	289	25	1	0	0	0	0	0	0	0	0	0	38	158	96	1	4	45	3	3	3	2	2	888	0	2380	2	2
291	290	25	2	0	0	0	1	0	0	0	0	0	40	158	75	1	10	0	3	3	3	1	2	888	0	2980	2	2
292	291	30	1	0	0	0	0	0	0	0	0	0	40	151	65	2	13	0	2	1	1	7	2	888	0	2700	2	2
293	292	21	1	0	0	0	0	0	0	0	0	0	41	161	94	4	10	50	1	2	1	7	2	888	0	3340	2	2
294	293	24	2	1	1	0	0	0	0	0	0	0	41	161	67	3	13	35	1	2	1	7	2	888	0	3140	2	2
295	294	29	3	2	2	0	0	0	0	0	0	0	41	155	59	3	10	15	1	2	1	7	2	888	0	3400	2	2
296	295	26	1	0	0	0	0	0	0	0	0	0	39	159	97	3	8	0	3	3	3	1	2	888	0	3200	2	2
297	296	28	1	0	0	0	0	0	0	0	0	0	40	155	78	2	13	30	3	3	3	1	2	888	0	2700	2	2
298	297	20	1	0	0	0	0	0	0	0	0	0	40	152	48	2	12	15	1	2	1	7	2	888	0	2790	2	2
299	298	18	2	0	0	0	1	0	0	0	0	0	40	157	65	2	12	30	1	2	1	7	2	888	0	2640	2	2
300	299	26	1	0	0	0	0	0	0	0	0	0	40	152	74	5	7	35	1	2	1	7	2	888	0	2820	2	1
301	300	20	1	0	0	0	0	0	0	0	0	0	40	155	73	2	12	55	3	3	3	1	2	888	0	3480	2	2
302	301	22	1	0	0	0	0	0	0	0	0	0	41	162	79	2	13	30	3	3	3	1	2	888	0	3220	2	2
303	302	21	1	0	0	0	0	0	0	0	0	0	41	161	69	3	12	50	3	3	3	1	2	888	0	3420	2	2
304	303	24	1	0	0	0	0	0	0	0	0	0	41	168	80	3	13	0	1	2	1	7	2	888	0	4010	2	2
305	304	26	3	2	2	0	0	0	0	0	0	0	39	159	71	3	8	40	1	1	1	7	2	888	0	3130	2	2
306	305	33	6	4	4	0	1	0	0	0	0	0	39	160	78	3	11	10	1	2	1	7	2	888	0	2650	2	2
307	306	26	2	1	0	1	0	0	0	0	0	0	37	162	73	4	4	10	1	2	1	7	2	888	0	2680	2	2
308	307	26	3	0	0	0	2	0	0	0	0	0	39	154	64	4	4	50	1	1	2	7	2	888	0	3460	2	2
309	308	22	1	0	0	0	0	0	0	0	0	0	41	158	63	2	15	30	2	2	1	7	2	888	0	3090	2	2
310	309	20	1	0	0	0	0	0	0	0	0	0	41	163	64	3	12	0	1	2	1	7	2	888	0	3490	2	2
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312	311	18	4	1	1	0	2	0	0	0	0	0	40	157	64	3	13	20	1	2	1	7	2	888	0	2850	2	2
313	312	20	2	1	1	0	0	0	0	0	0	0	41	161	86	3	11	45	1	1	1	7	2	888	0	3560	2	2
314	313	25	1	0	0	0	0	0	0	0	0	0	40	147	63	4	12	25	3	3	3	1	2	888	0	2760	2	2
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317	316	28	5	4	1	3	0	0	0	0	0	0	40	162	71	3	6	0	1	2	1	7	2	888	0	3320	2	2
318	317	24	1	0	0	0	0	0	0	0	0	0	40	159	86	4	12	20	1	2	2	7	2	888	0	3090	2	2
319	318	21	1	0	0	0	0	0	0	0	0	0	39	156	62	2	13	15	1	2	1	7	2	888	0	3230	2	2
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321	320	25	1	0	0	0	0	0	0	0	0	0	38	160	82	3	9	25	1	2	1	7	2	888	0	3530	2	2
322	321	33	3	2	1	0	0	1	0	0	0	0	39	162	68	3	10	15	1	1	1	7	2	888	0	2940	2	2
323	322	27	1	0	0	0	0	0	0	0	0	0	41	142	65	2	11	30	3	3	3	6	2	888	0	3760	2	2
324	323	23	1	0	0	0	0	0	0	0	0	0	40	170	87	3	17	30	1	2	1	7	2	888	0	3820	2	2

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325	324	26	1	0	0	0	0	0	0	0	0	0	38	156	76	3	16	0	1	2	1	7	2	888	0	2890	2	2
326	325	30	1	0	0	0	0	0	0	0	0	0	38	145	56	3	13	25	1	2	1	7	2	888	0	2690	2	2
327	326	29	2	1	1	0	0	0	0	0	0	0	40	165	81	3	8	0	1	1	1	7	2	888	1	3430	2	2
328	327	26	3	1	1	0	1	0	0	0	0	0	39	142	70	3	12	10	1	1	1	7	2	888	0	3300	2	2
329	328	29	2	1	1	0	0	0	0	0	0	0	37	162	60	3	12	55	2	2	1	7	2	888	0	2150	2	2
330	329	18	1	0	0	0	0	0	0	0	0	0	41	165	56	3	8	0	1	2	1	7	2	888	0	3040	2	2
331	330	26	1	0	0	0	0	0	0	0	0	0	40	156	73	4	13	0	3	3	3	3	2	888	0	3000	2	2
332	331	26	1	0	0	0	0	0	0	0	0	0	38	151	50	3	19	40	2	2	1	7	2	888	0	2500	2	2
333	332	26	1	0	0	0	0	0	0	0	0	0	41	151	59	2	17	15	3	3	3	1	2	888	0	2860	2	2
334	333	27	1	0	0	0	0	0	0	0	0	0	39	164	68	4	12	15	1	2	1	7	2	888	0	3200	2	2
335	334	23	2	1	1	0	0	0	0	0	0	0	40	162	61	4	8	0	1	2	1	7	2	888	0	3460	2	2
336	335	28	2	1	1	0	0	0	0	0	0	0	38	150	57	3	6	30	1	1	1	7	2	888	1	2580	2	2
337	336	29	3	2	2	0	0	0	0	0	0	0	40	158	62	3	9	15	1	2	1	7	2	888	0	3050	2	2
338	337	31	1	0	0	0	0	0	0	0	0	0	40	165	58	1	14	0	2	2	2	7	2	888	0	2890	2	2
339	338	27	1	0	0	0	0	0	0	0	0	0	41	155	56	3	12	15	1	2	1	7	2	888	0	3230	2	2
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341	340	34	3	0	0	0	2	0	0	0	0	0	39	154	63	0	12	5	1	2	2	7	2	888	0	2990	2	2
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343	342	22	2	1	1	0	0	0	0	0	0	0	38	155	59	3	8	25	1	2	1	7	2	888	0	2360	2	2
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345	344	21	1	0	0	0	0	0	0	0	0	0	37	156	52	1	8	30	1	2	1	7	2	888	0	2740	2	2
346	345	26	1	0	0	0	0	0	0	0	0	0	39	149	56	3	13	5	1	2	1	7	2	888	0	2950	2	2
347	346	21	1	0	0	0	0	0	0	0	0	0	39	165	60	3	9	50	1	2	1	7	2	888	0	2670	2	2
348	347	28	4	1	1	0	2	0	0	0	0	0	40	152	72	3	8	45	1	1	2	7	2	888	0	3450	2	2
349	348	23	1	0	0	0	0	0	0	0	0	0	41	159	67	2	16	20	2	2	2	7	2	888	0	2710	2	2
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352	351	26	1	0	0	0	0	0	0	0	0	0	39	154	119	5	12	50	1	2	1	7	2	888	0	2560	2	2
353	352	27	2	1	0	0	0	1	0	0	0	0	39	155	71	3	8	40	1	2	1	7	2	888	0	3050	2	2
354	353	31	3	1	0	0	1	1	0	0	0	0	39	157	70	4	10	0	1	1	1	7	2	888	0	2580	2	2
355	354	22	1	0	0	0	0	0	0	0	0	0	40	164	83	1	12	10	1	2	1	7	2	888	0	3380	2	2
356	355	28	2	1	1	0	0	0	0	0	0	0	40	156	71	4	13	10	1	2	1	7	2	888	0	3100	2	2
357	356	19	1	0	0	0	0	0	0	0	0	0	39	150	83	4	12	25	3	3	3	1	2	888	0	3400	2	2
358	357	24	1	0	0	0	0	0	0	0	0	0	40	158	70	1	9	35	1	2	2	7	2	888	0	2920	2	2
359	358	31	1	0	0	0	0	0	0	0	0	0	39	160	100	4	13	30	1	2	2	7	2	888	0	3000	2	2
360	359	25	1	0	0	0	0	0	0	0	0	0	40	156	75	4	14	35	1	2	2	7	2	888	0	3200	2	2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
361	360	29	1	0	0	0	0	0	0	0	0	0	40	150	65	3	15	25	3	3	3	6	2	888	0	2920	2	2
362	361										0	0																
363	362	20	1	0	0	0	0	0	0	0	0	0	39	150	54	3	6	30	3	3	3	1	2	888	0	2780	2	2
364	363	30	2	1	1	0	0	0	0	0	0	0	39	165	80	4	9	50	1	2	1	7	2	888	0	3570	2	2
365	364	29	3	2	2	0	0	0	0	0	0	0	39	157	90	3	11	0	1	2	1	7	2	888	0	3140	2	2
366	365	22	1	0	0	0	0	0	0	0	0	0	39	159	63	5	8	0	1	2	1	7	2	888	0	3120	2	2
367	366	24	1	0	0	0	0	0	0	0	0	0	40	159	65	3	11	40	1	2	2	7	2	888	0	3430	2	2
368	367	21	1	0	0	0	0	0	0	0	0	0	40	155	66	3	12	20	1	2	2	7	2	888	0	3190	2	2
369	368	33	2	0	0	0	1	0	0	0	0	0	39	155	66	3	7	50	1	1	1	7	2	888	0	3210	2	2
370	369	28	1	0	0	0	0	0	0	0	0	0	39	146	60	4	12	25	1	2	2	7	2	888	0	2810	2	2
371	370	21	1	0	0	0	0	0	0	0	0	0	41	160	55	4	11	55	1	2	2	7	2	888	0	3240	2	2
372	371	25	3	1	1	0	1	0	0	0	0	0	41	157	80	3	11	27	1	1	1	7	2	888	0	3000	2	2
373	372	25	1	0	0	0	0	0	0	0	0	0	40	157	71	3	8	0	1	2	2	7	2	888	0	3780	2	2
374	373	20	1	0	0	0	0	0	0	0	0	0	38	150	51	3	8	30	1	2	1	7	2	888	0	2410	2	2
375	374	27	5	1	1	0	3	0	0	0	0	0	40	150	54	4	13	15	1	2	1	7	2	888	0	2630	2	2
376	375	28	1	0	0	0	0	0	0	0	0	0	40	160	73	4	8	50	1	2	1	7	2	888	0	3360	2	2
377	376	34	1	0	0	0	0	0	0	0	0	0	41	157	97	4	14	45	2	2	2	7	2	888	0	3450	2	2
378	377	26	1	0	0	0	0	0	0	0	0	0	41	164	63	3	9	5	3	3	3	1	2	888	0	3060	2	2
379	378	27	1	0	0	0	0	0	0	0	0	0	41	157	74	2	11	50	3	3	3	1	2	888	0	2620	2	2
380	379										0	0																
381	380	26	1	0	0	0	0	0	0	0	0	0	38	158	92	2	12	30	3	3	3	1	2	888	0	2260	2	2
382	381	25	1	0	0	0	0	0	0	0	0	0	40	148	55	4	8	20	1	2	1	7	2	888	0	2760	2	2
383	382	25	1	0	0	0	0	0	0	0	0	0	41	163	71	3	12	5	3	3	3	1	2	888	0	2680	2	2
384	383	27	1	0	0	0	0	0	0	0	0	0	38	150	56	2	13	5	3	3	3	3	2	888	0	2880	2	2
385	384	27	1	0	0	0	0	0	0	0	0	0	38	165	68	4	8	20	3	3	3	6	2	888	0	3380	2	2
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388	387	21	1	0	0	0	0	0	0	0	0	0	39	163	93	3	13	50	3	3	3	2	2	888	0	3100	2	2
389	388	39	3	1	1	0	1	0	0	0	0	0	39	153	74	3	13	0	1	2	1	7	2	888	0	2720	2	2
390	389	18	1	0	0	0	0	0	0	0	0	0	41	162	67	5	12	10	1	2	1	7	2	888	0	2770	2	2
391	390	21	1	0	0	0	0	0	0	0	0	0	39	156	52	4	9	10	1	2	1	7	1	1	0	3020	2	2
392	391	24	1	0	0	0	0	0	0	0	0	0	41	155	56	4	12	40	1	2	1	7	2	888	0	3000	2	2
393	392										0	0																
394	393	23	3	0	0	0	2	0	0	0	0	0	40	155	65	4	13	10	1	2	1	7	2	888	0	2820	2	2
395	394	24	1	0	0	0	0	0	0	0	0	0	40	159	80	4	13	25	3	3	3	1	2	888	3	4080	2	2
396	395	26	1	0	0	0	0	0	0	0	0	0	41	155	86	3	12	15	3	3	3	6	2	888	0	2920	2	2

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397	396	24	1	0	0	0	0	0	0	0	0	0	40	152	59	3	11	45	1	2	2	7	2	888	0	3090	2	2
398	397	22	6	1	1	0	4	0	0	0	0	0	38	151	77	5	9	30	1	2	1	7	2	888	0	2800	2	2
399	398	26	2	1	1	0	0	0	0	0	0	0	39	155	76	5	12	5	1	2	1	7	2	888	0	3370	2	2
400	399	32	4	2	2	0	1	0	0	0	0	0	39	154	74	4	8	10	3	3	3	1	2	888	0	3100	2	2
401	400	21	1	0	0	0	0	0	0	0	0	0	39	153	52	4	12	45	1	2	1	7	2	888	0	3150	2	2
402	401	26	2	1	1	0	0	0	0	0	0	0	41	156	68	5	11	45	1	2	2	7	2	888	0	3500	2	2
403	402	21	1	0	0	0	0	0	0	0	0	0	39	152	53	3	8	0	1	2	2	7	2	888	0	2450	2	2
404	403	29	2	0	0	0	0	0	0	0	1	0	40	153	65	3	12	15	3	3	3	4	2	888	0	3440	2	2
405	404	22	1	0	0	0	0	0	0	0	0	0	41	160	53	3	7	5	3	3	3	1	2	888	0	2960	2	2
406	405	21	1	0	0	0	0	0	0	0	0	0	41	144	55	2	7	50	3	3	3	6	2	888	0	2560	2	2
407	406	33	3	0	0	0	2	0	0	0	0	0	40	156	65	2	11	20	1	1	1	7	2	888	0	3010	2	2
408	407	24	1	0	0	0	0	0	0	0	0	0	40	158	50	3	8	10	1	1	2	1	2	888	0	3200	2	2
409	408	33	2	1	1	0	0	0	0	0	0	0	37	161	73	2	12	30	2	2	1	7	2	888	0	2470	2	2
410	409	26	1	0	0	0	0	0	0	0	0	0	41	158	78	3	12	0	2	2	1	7	2	888	0	3440	2	2
411	410										0	0																
412	411	20	1	0	0	0	0	0	0	0	0	0	38	155	92	3	11	40	1	2	2	7	2	888	0	3230	2	2
413	412	27	1	0	0	0	0	0	0	0	0	0	39	156	63	3	13	30	1	2	1	7	2	888	0	3140	2	2
414	413	19	2	0	0	0	1	0	0	0	0	0	41	154	50	5	12	40	1	2	1	7	2	888	0	3130	2	2
415	414	28	1	0	0	0	0	0	0	0	0	0	41	151	64	4	14	15	3	3	3	1	1	3	0	2660	2	2
416	415	25	2	1	1	0	0	0	0	0	0	0	40	171	73	4	10	27	1	1	1	7	2	888	0	3230	2	2
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420	419	18	1	0	0	0	0	0	0	0	0	0	40	159	61	5	8	10	1	1	1	7	2	888	0	2860	2	2
421	420	22	1	0	0	0	0	0	0	0	0	0	41	155	80	3	8	15	1	2	1	7	2	888	0	3050	2	2
422	421	21	1	0	0	0	0	0	0	0	0	0	41	161	61	4	8	0	3	3	3	6	2	888	0	3560	2	2
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424	423	24	1	0	0	0	0	0	0	0	0	0	39	158	60	5	10	45	1	2	1	7	2	888	0	3500	2	2
425	424										0	0																
426	425	22	2	1	1	0	0	0	0	0	0	0	40	158	56	3	17	15	1	2	1	7	2	888	0	3010	2	2
427	426	34	2	1	1	0	0	0	0	0	0	0	41	158	83	4	10	55	1	2	1	7	2	888	0	4180	2	2
428	427	24	1	0	0	0	0	0	0	0	0	0	39	160	72	3	11	40	1	2	2	7	2	888	0	3710	2	2
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430	429	25	1	0	0	0	0	0	0	0	0	0	40	158	68	5	11	20	2	2	2	7	2	888	0	3480	2	2
431	430	27	1	0	0	0	0	0	0	0	0	0	41	149	59	3	12	0	3	3	3	6	2	888	0	3120	2	2
432	431	23	1	0	0	0	0	0	0	0	0	0	41	164	67	4	13	0	1	2	1	7	2	888	0	2860	2	2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
433	432	22	1	0	0	0	0	0	0	0	0	0	40	159	92	2	10	45	3	3	3	1	2	888	0	3260	2	2
434	433	30	1	0	0	0	0	0	0	0	0	0	39	151	76	3	11	40	1	2	2	7	2	888	0	2520	2	2
435	434	25	1	0	0	0	0	0	0	0	0	0	40	146	55	3	12	20	3	3	3	6	2	888	0	3200	2	2
436	435	32	1	0	0	0	0	0	0	0	0	0	41	161	67	2	14	20	3	3	3	6	2	888	0	3020	2	2
437	436	26	1	0	0	0	0	0	0	0	0	0	41	170	63	3	14	25	2	2	2	7	2	888	1	3260	2	2
438	437	22	2	1	1	0	0	0	0	0	0	0	40	160	83	3	12	30	1	2	1	7	2	888	1	2750	2	2
439	438	25	2	1	1	0	0	0	0	0	0	0	39	154	68	2	4	45	1	1	1	7	2	888	0	3330	2	2
440	439	33	4	2	2	0	1	0	0	0	0	0	40	155	63	4	10	30	1	1	1	7	2	888	0	3040	2	2
441	440	28	1	0	0	0	0	0	0	0	0	0	41	150	74	3	8	45	3	3	3	6	2	888	0	2820	2	2
442	441	28	1	0	0	0	0	0	0	0	0	0	40	156	70	2	15	15	1	2	1	7	2	888	0	2620	2	2
443	442	28	1	0	0	0	0	0	0	0	0	0	40	161	60	2	15	30	2	2	2	7	2	888	1	2790	2	2
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445	444	24	1	0	0	0	0	0	0	0	0	0	40	156	72	4	13	45	2	2	1	7	2	888	0	3110	2	2
446	445	27	1	0	0	0	0	0	0	0	0	0	39	155	60	2	2	0	1	2	1	7	2	888	0	3020	2	2
447	446	23	1	0	0	0	0	0	0	0	0	0	40	154	66	4	13	0	2	2	1	7	2	888	0	3380	2	2
448	447										0	0																
449	448	26	1	0	0	0	0	0	0	0	0	0	40	166	70	3	13	20	1	2	1	7	2	888	0	3240	2	2
450	449	23	1	0	0	0	0	0	0	0	0	0	41	151	43	5	8	15	1	1	1	7	2	888	0	2810	2	2
451	450	22	2	0	0	0	1	0	0	0	0	0	40	150	68	1	14	0	1	2	1	7	2	888	0	3070	2	2
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455	454	26	3	1	1	0	1	0	0	0	0	0	40	152	66	2	8	30	1	1	1	7	2	888	0	3230	2	2
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458	457	27	1	0	0	0	0	0	0	0	0	0	41	155	57	4	12	10	1	2	2	7	2	888	0	3120	2	2
459	458	24	4	0	0	0	3	0	0	0	0	0	40	157	65	4	7	45	1	1	1	7	2	888	0	3280	2	2
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461	460	24	2	1	1	0	0	0	0	0	0	0	40	151	73	4	11	40	1	1	1	7	2	888	0	2960	2	2
462	461	23	1	0	0	0	0	0	0	0	0	0	40	164	65	3	14	30	1	2	1	7	2	888	0	3740	2	2
463	462	28	1	0	0	0	0	0	0	0	0	0	41	160	72	3	10	20	3	3	3	6	2	888	0	4020	2	2
464	463	24	3	0	0	0	1	0	0	0	0	1	41	142	58	1	12	30	3	3	3	1	2	888	0	2920	2	2
465	464	30	1	0	0	0	0	0	0	0	0	0	41	155	56	1	11	50	3	3	3	1	2	888	0	2400	2	2
466	465	21	2	1	1	0	0	0	0	0	0	0	40	155	54	5	11	0	1	2	2	7	2	888	0	3010	2	2
467	466	21	2	0	0	0	1	0	0	0	0	0	40	162	66	3	15	10	3	3	3	6	2	888	0	3500	2	2
468	467	29	3	2	2	0	0	0	0	0	0	0	40	165	57	4	11	14	1	1	1	7	2	888	0	2920	2	2



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470	469	26	2	0	0	0	1	0	0	0	0	0	39	156	70	2	13	15	3	3	3	1	2	888	0	3260	2	2
471	470	26	2	1	1	0	0	0	0	0	0	0	39	158	58	3	11	5	1	2	1	7	2	888	0	2570	2	2
472	471	29	2	0	0	0	1	0	0	0	0	0	40	151	68	3	12	0	1	2	1	7	2	888	0	3320	2	2
473	472	27	2	1	1	0	0	0	0	0	0	0	40	156	62	5	8	30	1	1	1	7	2	888	0	3540	2	2
474	473	21	1	0	0	0	0	0	0	0	0	0	41	160	62	4	9	10	1	2	1	7	2	888	0	2820	2	2
475	474	23	2	1	1	0	0	0	0	0	0	0	40	162	75	5	9	0	1	1	1	7	2	888	0	3340	2	2
476	475	24	1	0	0	0	0	0	0	0	0	0	40	160	78	2	12	0	1	2	1	7	2	888	0	2830	2	2
477	476	22	1	0	0	0	0	0	0	0	0	0	40	157	59	2	7	0	1	2	2	7	2	888	0	3330	2	2
478	477	24	2	1	1	0	0	0	0	0	0	0	41	153	57	4	4	45	1	1	1	7	2	888	0	3240	2	2
479	478	22	1	0	0	0	0	0	0	0	0	0	40	164	63	2	8	20	3	3	3	6	2	888	0	3200	2	2
480	479	30	1	0	0	0	0	0	0	0	0	0	38	152	60	1	13	0	1	2	2	7	2	888	0	2970	2	2
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506	505	22	2	1	1	0	0	0	0	0	0	0	39	146	55	3	3	5	3	3	3	1	2	888	0	2720	2	2
507	506	25	1	0	0	0	0	0	0	0	0	0	41	149	51	4	888	888	3	3	3	10	2	888	0	2140	2	2
508	507	26	1	0	0	0	0	0	0	0	0	0	38	150	69	5	4	10	1	1	1	7	2	888	0	2800	2	2
509	508	31	4	2	1	0	1	1	0	0	0	0	40	157	66	4	12	10	1	2	1	7	2	888	0	3090	2	2
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513	512	35	3	2	2	0	0	0	0	0	0	0	39	157	64	3	13	35	3	3	3	6	2	888	0	2660	2	2
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515	514	28	1	0	0	0	0	0	0	0	0	0	40	155	76	3	11	45	2	2	2	7	2	888	0	3400	2	2
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527	526	27	2	1	1	0	0	0	0	0	0	0	38	161	62	2	12	31	1	2	1	7	2	888	0	3430	2	2
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540	539	23	1	0	0	0	0	0	0	0	0	0	41	161	66	3	8	0	1	2	1	7	2	888	0	2980	2	2

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542	541	25	5	2	1	0	2	0	1	0	0	0	37	162	89	3	12	20	1	2	1	7	2	888	0	3300	2	2
543	542	23	1	0	0	0	0	0	0	0	0	0	37	159	84	5	14	0	2	2	2	7	1	1	1	3640	2	2
544	543	22	1	0	0	0	0	0	0	0	0	0	40	161	63	4	12	0	1	2	1	7	2	888	0	2900	2	2
545	544	27	1	0	0	0	0	0	0	0	0	0	40	165	75	5	4	0	1	1	1	7	2	888	0	3460	2	2
546	545	24	1	0	0	0	0	0	0	0	0	0	41	160	74	2	12	45	3	3	3	6	2	888	0	3300	2	2
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550	549	21	2	0	0	0	1	0	0	0	0	0	40	152	61	1	14	55	1	2	1	7	2	888	0	2830	2	2
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554	553	27	1	0	0	0	0	0	0	0	0	0	40	160	74	2	12	0	3	3	3	6	2	888	0	3180	2	2
555	554	23	2	1	1	0	0	0	0	0	0	0	40	164	69	4	12	10	1	2	1	7	2	888	0	3280	2	2
556	555	25	1	0	0	0	0	0	0	0	0	0	41	154	94	2	12	45	2	2	1	7	2	888	1	3090	2	1
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558	557	27	1	0	0	0	0	0	0	0	0	0	41	155	56	5	12	0	1	2	2	7	2	888	0	3660	2	2
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564	563	32	1	0	0	0	0	0	0	0	0	0	39	157	82	5	4	35	1	2	1	7	2	888	0	3120	2	2
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566	565	20	2	1	1	0	0	0	0	0	0	0	41	160	80	4	12	15	1	2	1	7	2	888	0	4250	2	2
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569	568	24	4	2	2	0	1	0	0	0	0	0	41	158	75	5	9	5	1	2	2	7	2	888	0	3680	2	2
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573	572	27	1	0	0	0	0	0	0	0	0	0	38	157	53	4	8	0	1	2	2	7	2	888	0	2380	2	2
574	573	29	1	0	0	0	0	0	0	0	0	0	38	149	60	5	7	30	1	1	1	7	2	888	0	2900	2	2
575	574	27	1	0	0	0	0	0	0	0	0	0	38	161	70	3	4	0	3	3	3	1	2	888	0	2080	2	2
576	575	30	1	0	0	0	0	0	0	0	0	0	38	170	80	4	12	20	2	2	1	7	2	888	0	3220	2	2

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578	577	28	1	0	0	0	0	0	0	0	0	0	39	161	65	2	12	45	3	3	3	6	2	888	0	2560	2	2
579	578	20	1	0	0	0	0	0	0	0	0	0	41	149	69	4	12	30	3	3	3	1	2	888	0	2440	2	2
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615	614	23	1	0	0	0	0	0	0	0	0	0	41	159	45	2	12	5	1	2	1	7	2	888	0	3270	2	2
616	615	35	4	1	1	0	2	0	0	0	0	0	40	153	40	2	12	15	1	2	1	7	2	888	0	2720	2	2
617	616	20	2	1	1	0	0	0	0	0	0	0	40	156	64	4	8	0	1	1	1	7	2	888	0	2620	2	2
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622	621	27	1	0	0	0	0	0	0	0	0	0	40	157	73	4	12	0	3	3	3	1	2	888	0	2860	2	2
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640	639	27	2	0	0	0	1	0	0	0	0	0	39	162	70	3	14	25	3	3	3	3	2	888	0	3420	2	2
641	640											0	0															
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651	650	22	1	0	0	0	0	0	0	0	0	0	38	153	80	4	15	20	2	2	2	7	2	888	0	2300	2	2
652	651	30	1	0	0	0	0	0	0	0	0	0	41	160	72	3	15	10	1	2	2	7	2	888	0	3450	2	2
653	652	25	2	0	0	0	1	0	0	0	0	0	37	162	93	2	16	0	3	3	3	6	2	888	0	3280	2	2
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664	663	24	1	0	0	0	0	0	0	0	0	0	40	151	70	3	11	30	3	3	3	6	2	888	0	4080	2	2
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688	687	23	2	0	0	0	1	0	0	0	0	0	41	156	56	2	15	15	2	2	1	7	2	888	0	3840	2	2
689	688	26	3	1	1	0	1	0	0	0	0	0	41	161	65	2	14	55	2	2	1	7	2	888	0	2640	2	2
690	689	20	1	0	0	0	0	0	0	0	0	0	40	165	70	3	14	7	2	2	1	7	2	888	0	3140	2	2
691	690	26	1	0	0	0	0	0	0	0	0	0	41	151	66	3	13	5	1	2	2	7	2	888	0	3270	2	2
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698	697	21	1	0	0	0	0	0	0	0	0	0	41	165	92	3	14	10	2	2	1	7	2	888	0	3500	2	2
699	698	20	1	0	0	0	0	0	0	0	0	0	40	150	51	4	14	15	1	2	1	7	2	888	0	3150	2	2
700	699	22	1	0	0	0	0	0	0	0	0	0	40	164	80	3	16	0	1	2	1	7	2	888	0	2830	2	2
701	700	24	4	1	1	0	2	0	0	0	0	0	41	158	60	3	12	10	1	2	1	7	2	888	0	3680	2	2
702	701	24	3	2	2	0	0	0	0	0	0	0	41	152	55	3	14	15	1	2	1	7	2	888	0	3120	2	2
703	702	26	3	1	1	0	1	0	0	0	0	0	40	161	74	3	14	0	1	2	2	7	2	888	0	3120	2	2
704	703	19	1	0	0	0	0	0	0	0	0	0	40	159	48	4	12	10	1	2	1	7	2	888	0	2960	2	2
705	704	30	1	0	0	0	0	0	0	0	0	0	39	149	56	0	20	45	3	3	3	6	2	888	0	2360	2	2
706	705	27	2	1	0	1	0	0	0	0	0	0	38	149	58	5	12	0	1	2	1	7	2	888	0	2840	2	2
707	706	25	2	0	0	0	1	0	0	0	0	0	40	159	60	4	10	45	1	2	1	7	2	888	0	2520	2	2
708	707	18	1	0	0	0	0	0	0	0	0	0	41	168	70	4	8	10	1	2	1	7	2	888	1	3480	2	2
709	708	28	1	0	0	0	0	0	0	0	0	0	39	160	88	4	13	0	1	2	1	7	2	888	0	2820	2	2
710	709	21	1	0	0	0	0	0	0	0	0	0	40	155	66	3	8	10	1	2	2	7	2	888	3	2420	2	2
711	710	28	1	0	0	0	0	0	0	0	0	0	37	147	76	2	888	888	3	3	3	5	2	888	3	3400	2	1
712	711	18	1	0	0	0	0	0	0	0	0	0	40	157	74	1	8	20	1	2	1	7	2	888	0	3180	2	2
713	712	20	1	0	0	0	0	0	0	0	0	0	41	151	47	4	12	15	1	2	2	7	2	888	1	2890	2	2
714	713	33	1	0	0	0	0	0	0	0	0	0	41	161	62	3	4	0	1	1	1	7	2	888	6	2630	2	1
715	714	25	3	2	2	0	0	0	0	0	0	0	39	147	52	5	8	30	1	2	1	7	2	888	0	3280	2	2
716	715	21	3	1	1	0	1	0	0	0	0	0	39	155	63	5	8	35	1	1	1	7	2	888	1	2830	2	2
717	716	28	1	0	0	0	0	0	0	0	0	0	41	162	57	3	12	30	1	2	1	7	2	888	0	3150	2	2
718	717	21	1	0	0	0	0	0	0	0	0	0	40	161	61	3	8	35	1	2	2	7	2	888	0	3000	2	2
719	718	21	1	0	0	0	0	0	0	0	0	0	40	159	69	2	0	45	3	3	3	1	2	888	0	2460	2	2
720	719	21	1	0	0	0	0	0	0	0	0	0	41	162	72	5	4	0	1	2	2	7	2	888	0	2860	2	2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
721	720	29	1	0	0	0	0	0	0	0	0	0	41	160	65	4	12	0	3	3	3	1	2	888	0	2920	2	2
722	721	20	1	0	0	0	0	0	0	0	0	0	41	158	78	3	13	15	2	2	2	7	2	888	0	3350	2	1
723	722	22	1	0	0	0	0	0	0	0	0	0	39	159	65	4	8	0	1	2	1	7	2	888	0	2410	2	2
724	723	29	3	1	1	0	1	0	0	0	0	0	40	152	65	3	15	40	1	2	2	7	2	888	0	2660	2	2
725	724	26	4	2	1	1	1	0	0	0	0	0	40	160	76	4	13	30	1	2	1	7	2	888	0	3140	2	2
726	725	25	1	0	0	0	0	0	0	0	0	0	40	155	63	4	8	30	1	2	1	7	1	1	2	2480	2	2
727	726	26	1	0	0	0	0	0	0	0	0	0	40	154	75	4	14	0	3	3	3	4	2	888	0	3300	2	2
728	727	27	2	0	0	0	1	0	0	0	0	0	40	160	65	2	13	0	1	2	1	7	2	888	0	3500	2	2
729	728	37	5	2	2	0	2	0	0	0	0	0	40	154	66	5	8	20	1	2	1	7	2	888	0	3120	2	2
730	729	29	1	0	0	0	0	0	0	0	0	0	38	160	82	4	12	0	1	2	2	7	2	888	0	3620	2	2
731	730	20	2	0	0	0	1	0	0	0	0	0	39	150	46	3	12	10	3	3	3	6	2	888	0	2500	2	2
732	731	24	1	0	0	0	0	0	0	0	0	0	40	160	81	4	13	15	2	2	1	7	2	888	0	3440	2	2
733	732	20	1	0	0	0	0	0	0	0	0	0	41	156	60	2	12	50	2	2	2	7	2	888	0	2950	2	2
734	733	21	1	0	0	0	0	0	0	0	0	0	40	154	47	3	4	10	3	3	3	1	2	888	0	3420	2	2
735	734	25	2	1	1	0	0	0	0	0	0	0	40	155	70	3	16	30	1	2	1	7	2	888	0	2650	2	2
736	735	23	2	1	1	0	0	0	0	0	0	0	39	158	61	2	14	30	1	2	1	7	2	888	0	2910	2	2
737	736	26	4	2	1	0	1	1	0	0	0	0	38	150	54	4	13	30	1	2	1	7	2	888	0	2570	2	2
738	737	22	2	1	1	0	0	0	0	0	0	0	40	163	67	5	13	5	1	2	1	7	2	888	0	3370	2	2
739	738	29	1	0	0	0	0	0	0	0	0	0	39	163	77	3	12	0	1	2	2	7	2	888	0	3240	2	2
740	739	19	1	0	0	0	0	0	0	0	0	0	38	151	61	2	8	0	3	3	3	1	2	888	0	2360	2	2
741	740	24	3	1	1	0	1	0	0	0	0	0	39	162	86	3	10	45	1	2	1	7	2	888	0	2940	2	2
742	741	21	2	1	1	0	0	0	0	0	0	0	41	159	54	3	13	30	3	3	3	1	2	888	0	2980	2	2
743	742	29	1	0	0	0	0	0	0	0	0	0	38	161	89	4	8	0	1	2	2	7	2	888	0	3230	2	2
744	743	27	1	0	0	0	0	0	0	0	0	0	40	165	64	4	12	15	1	2	1	7	2	888	0	3290	2	2
745	744	24	2	0	0	0	1	0	0	0	0	0	41	162	57	3	13	10	2	2	2	7	2	888	2	3380	2	2
746	745	26	4	2	2	0	1	0	0	0	0	0	39	159	70	3	12	55	1	2	1	7	2	888	0	2320	2	2
747	746	30	2	1	1	0	0	0	0	0	0	0	40	154	68	4	10	45	1	2	1	7	2	888	0	2680	2	2
748	747	22	1	0	0	0	0	0	0	0	0	0	40	165	71	2	8	30	1	2	1	7	2	888	0	3620	2	2
749	748	31	5	4	4	0	0	0	0	0	0	0	40	160	80	4	8	0	1	2	1	7	2	888	0	3630	2	2
750	749	23	1	0	0	0	0	0	0	0	0	0	37	157	67	1	13	45	2	2	1	7	2	888	0	2710	2	2
751	750	26	4	1	1	0	2	0	0	0	0	0	38	170	63	3	8	15	1	2	1	7	2	888	0	2330	2	2
752	751	32	2	1	1	0	0	0	0	0	0	0	38	161	55	4	12	50	1	2	2	7	2	888	0	2260	2	2
753	752	22	1	0	0	0	0	0	0	0	0	0	39	153	55	0	14	0	1	2	1	7	2	888	0	2710	2	2
754	753	33	3	1	1	0	1	0	0	0	0	0	40	153	102	3	12	30	1	2	1	7	2	888	0	2940	2	2
755	754	26	1	0	0	0	0	0	0	0	0	0	37	148	66	4	12	30	2	2	2	7	2	888	0	3180	2	2
756	755	22	1	0	0	0	0	0	0	0	0	0	38	152	56	2	11	25	1	2	1	7	2	888	0	2490	2	2



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
757	756	24	1	0	0	0	0	0	0	0	0	0	38	152	64	2	16	25	1	2	1	7	2	888	0	2540	2	2
758	757	31	2	1	1	0	0	0	0	0	0	0	39	158	80	3	12	10	1	2	1	7	2	888	0	3050	2	2
759	758	23	1	0	0	0	0	0	0	0	0	0	39	153	58	2	12	0	3	3	3	3	2	888	0	2520	2	2
760	759	22	1	0	0	0	0	0	0	0	0	0	40	149	89	4	8	0	1	2	1	7	2	888	0	3250	2	2
761	760	28	2	1	1	0	0	0	0	0	0	0	39	150	74	3	12	0	1	2	1	7	2	888	0	2830	2	2
762	761	27	1	0	0	0	0	0	0	0	0	0	39	151	62	2	17	10	2	2	1	7	2	888	0	2950	2	2
763	762										0	0																
764	763	25	2	1	1	0	0	0	0	0	0	0	41	155	65	3	8	0	1	2	1	7	2	888	0	3100	2	2
765	764	27	6	1	0	0	4	0	1	0	0	0	39	157	73	2	12	15	3	3	3	6	2	888	0	2990	2	2
766	765	31	2	0	0	0	1	0	0	0	0	0	38	148	62	4	12	0	1	2	1	7	2	888	0	2630	2	2
767	766	30	2	1	1	0	0	0	0	0	0	0	40	161	68	3	16	0	1	2	1	7	2	888	0	3240	2	2
768	767	20	1	0	0	0	0	0	0	0	0	0	41	159	65	2	15	35	3	3	3	6	2	888	3	3400	2	2
769	768	27	3	1	1	0	1	0	0	0	0	0	40	163	66	4	9	30	1	1	1	7	2	888	0	3030	2	2
770	769	21	5	1	1	0	3	0	0	0	0	0	40	160	64	5	12	6	1	2	1	7	2	888	0	2950	2	2
771	770	22	1	0	0	0	0	0	0	0	0	0	38	150	57	5	12	35	1	2	1	7	2	888	0	2250	2	2
772	771										0	0																
773	772	20	1	0	0	0	0	0	0	0	0	0	39	161	53	2	14	45	1	2	2	7	2	888	0	2620	2	2
774	773	20	1	0	0	0	0	0	0	0	0	0	40	142	57	1	12	30	1	2	1	7	2	888	0	2680	2	2
775	774	26	2	1	1	0	0	0	0	0	0	0	40	146	65	0	7	45	1	1	1	7	2	888	0	2970	2	2
776	775	25	1	0	0	0	0	0	0	0	0	0	41	153	63	5	12	10	1	2	2	7	2	888	0	3090	2	2
777	776	34	1	0	0	0	0	0	0	0	0	0	39	157	95	0	13	30	3	3	3	1	2	888	0	2780	2	2
778	777	22	3	1	1	0	1	0	0	0	0	0	37	165	89	3	11	50	1	2	1	7	2	888	0	3070	2	2
779	778	30	1	0	0	0	0	0	0	0	0	0	39	155	86	4	12	30	1	2	2	7	2	888	0	3020	2	2

	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
1	PH	NEO	NEO	DO	OXY	UNIT	BSA	MSA	COL	IDI	IDI	HYP	TRU	TERB	TRA	TYPE	CHOI	IFI
2	2	2	2	2	1	2.5	7	2	888	19	0	1	1	2	1	2	2	4
3	4	2	2	3	1	2.5	9	2	888	19	0	2	2	2	1	2	2	1
4	4	2	2	2	2	888	6	2	888	11	0	1	1	2	1	2	2	1
5	4	2	2	2	1	2.5	8	2	888	14	25	2	2	2	2	888	2	5
6	4	2	2	2	1	2.5	7	2	888	14	30	2	2	2	1	1	2	4
7	4	2	2	1	2	888	6	2	888	8	0	2	2	2	1	1	2	5
8	4	2	2	2	1	2.5	5	2	888	20	30	1	1	1	1	2	2	4
9	4	2	2	2	1	7.5	5	1	1	15	15	2	2	2	1	1	2	1
10	4	2	2	1	1	7.5	4	2	888	25	32	2	2	2	2	888	2	1
11	4	2	2	2	1	2.5	5	1	1	17	0	1	1	2	1	2	2	5
12	4	2	2	1	2	888	8	2	888	4	45	2	2	2	2	888	2	1
13	4	2	2	2	1	2.5	5	2	888	13	50	2	2	2	1	2	2	1
14	4	2	2	1	2	888	8	2	888	9	0	2	2	2	2	888	2	4
15	4	2	2	2	2	888	6	2	888	10	0	2	2	2	1	1	2	5
16	4	2	2	2	1	7.5	6	2	888	22	0	2	2	2	2	888	2	1
17	4	2	2	2	1	2.5	6	2	888	11	46	2	2	2	2	888	2	4
18	4	2	2	2	1	2.5	6	2	888	15	19	1	1	2	2	888	2	1
19	4	2	2	2	1	2.5	8	2	888	9	0	2	2	2	1	1	2	4
20	4	2	2	3	1	7.5	6	2	888	23	26	2	2	2	1	2	2	1
21	4	2	2	3	1	7.5	6	2	888	24	33	2	2	2	2	888	2	1
22	4	2	2	2	1	2.5	6	1	1	17	0	2	2	2	1	2	2	1
23	4	2	2	1	1	7.5	8	2	888	13	50	1	1	2	1	4	2	4
24	4	2	2	2	1	2.5	7	2	888	13	38	1	1	1	1	2	2	4
25	4	2	2	2	1	2.5	7	2	888	11	43	2	2	2	2	888	2	4
26	4	2	2	2	1	2.5	6	2	888	13	17	2	2	2	1	1	2	1
27	4	2	2	3	1	2.5	6	2	888	16	44	2	2	2	2	888	2	4
28	4	2	2	2	1	2.5	9	2	888	18	15	2	2	2	2	888	2	1
29	4	2	2	2	1	7.5	5	2	888	11	38	2	2	2	1	2	2	1
30	4	2	2	2	2	888	5	2	888	7	5	2	2	2	1	6	2	1
31	4	2	2	2	1	2.5	5	1	1	18	50	2	2	2	1	6	2	1
32	4	2	2	2	1	2.5	7	1	1	17	49	2	2	2	2	888	2	1
33	4	2	2	2	1	2.5	5	2	888	11	5	2	2	2	1	2	2	4
34	4	2	2	2	1	2.5	9	2	888	11	12	2	2	2	1	1	2	1
35	4	2	2	2	2	888	11	1	1	10	25	2	2	2	1	2	2	1
36	4	2	2	3	1	2.5	3	2	888	24	24	1	1	2	1	6	2	5

	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
37	4	2	2	1	1	2.5	7	2	888	13	20	1	1	2	1	4	2	1
38	4	2	2	2	1	2.5	7	2	888	11	13	2	2	2	1	4	2	4
39	4	2	2	2	2	888	6	2	888	14	42	1	1	1	1	2	2	1
40	4	2	2	1	2	888	9	2	888	8	20	2	2	2	2	888	2	1
41	1	2	2	2	1	2.5	6	2	888	15	12	2	2	2	1	6	2	4
42	4	2	2	2	2	888	5	2	888	11	25	2	2	2	2	888	2	4
43	4	2	2	2	1	7.5	5	2	888	20	56	1	1	1	1	4	2	1
44	4	2	2	3+2	1	7.5	9	2	888	26	10	2	2	2	1	2	2	1
45	4	2	2	2	2	888	6	2	888	10	55	1	1	2	1	6	2	4
46	4	2	2	1	2	888	7	2	888	14	38	2	2	2	2	888	2	1
47	4	2	2	3	1	2.5	5	1	2	19	32	2	2	2	2	888	2	2
48	4	2	2	1	1	7.5	5	2	888	19	47	2	2	2	1	1	2	2
49	4	2	2	2	1	2.5	7	2	888	14	10	2	2	2	2	888	2	1
50	4	2	2	1	2	888	7	1	1	8	0	2	2	2	1	2	2	1
51	4	2	2	2	1	2.5	9	2	888	22	23	2	2	2	2	888	2	1
52	4	2	2	2	2	888	13	2	888	8	30	2	2	2	1	2	2	4
53	4	2	2	2	2	888	12	2	888	10	55	1	1	2	1	2	2	1
54	4	2	2	2	1	2.5	5	2	888	11	27	1	1	1	1	7	2	2
55	4	2	2	1	2	888	10	2	888	10	40	1	2	2	1	2	2	1
56	4	2	2	3	1	7.5	9	1	1	23	28	2	2	2	1	2	2	1
57	4	2	2	2	1	2.5	9	2	888	9	45	1	1	1	2	888	2	1
58	4	2	2	3	1	7.5	5	2	888	29	27	2	2	2	2	888	2	5
59	4	2	2	2	1	2.5	6	2	888	20	22	1	1	1	1	1	2	1
60	4	2	2	2	1	7.5	5	2	888	26	55	2	2	2	1	6	2	5
61	4	2	2	2	2	888	13	2	888	8	3	1	2	2	2	888	2	1
62	4	2	1	1	2	888	13	2	888	3	48	2	2	2	2	888	2	2
63	4	2	2	3	1	2.5	5	2	888	19	41	2	2	2	2	888	2	4
64	4	2	2	2	1	2.5	6	1	1	23	11	1	1	1	1	2	2	1
65	4	2	2	3	1	2.5	7	2	888	18	27	2	2	2	1	2	2	1
66	4	2	2	2	2	888	6	2	888	11	21	2	2	2	1	1	2	4
67	4	2	2	2	1	2.5	7	2	888	16	0	2	2	2	1	2	2	2
68	4	2	2	2	1	2.5	8	2	888	18	10	2	2	2	1	2	2	1
69	4	2	2	1	1	2.5	8	2	888	6	26	2	2	2	2	888	2	5
70	4	2	2	2	1	2.5	12	2	888	12	26	1	1	1	1	2	2	5
71	4	2	2	1	1	2.5	6	1	1	21	43	1	1	1	1	4	2	1
72	4	2	2	2	1	2.5	6	2	888	17	43	2	2	2	1	2	2	5

	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
73	4	2	2	3	2	888	5	1	2	16	26	2	2	2	2	888	2	1
74	4	2	2	3	2	888	7	2	888	16	50	2	2	2	1	2	2	2
75	4	2	2	1	1	2.5	7	2	888	11	37	2	2	2	1	2	2	1
76	4	2	2	3	1	2.5	2	2	888	27	0	2	2	2	2	2	2	1
77	4	2	2	2	1	2.5	6	2	888	15	0	2	2	2	2	888	2	1
78	4	2	2	1	2	888	12	1	1	5	18	1	1	2	1	2	2	1
79	4	2	2	2	1	2.5	6	2	888	11	21	1	2	2	2	888	2	1
80	4	2	2	2	1	2.5	5	2	888	26	32	2	2	2	1	7	2	1
81	4	2	2	2	1	2.5	7	2	888	10	54	1	1	2	1	2	2	1
82	4	2	2	2	1	2.5	4	1	1	16	35	1	1	1	1	2	2	1
83	4	2	2	2	1	2.5	5	2	888	16	33	2	2	2	1	2	2	1
84	4	2	2	2	1	2.5	6	1	1	17	54	1	1	1	1	4	2	1
85	4	2	2	2	1	7.5	7	2	888	18	0	2	2	2	2	888	2	4
86	4	2	2	3	1	6	4	2	888	19	8	2	2	2	1	6	2	1
87	4	2	2	2	1	2.5	7	2	888	12	45	2	2	2	2	888	2	4
88	4	2	2	2	1	7.5	5	2	888	16	44	2	2	2	2	888	2	5
89	4	2	2	1	2	888	13	2	888	8	25	2	2	2	2	888	2	4
90	4	2	2	3	1	7.5	5	2	888	18	0	2	2	2	2	888	2	4
91	4	2	2	2	2	888	7	2	888	9	5	2	2	2	1	1	2	4
92	4	2	2	3	2	888	13	2	888	12	5	2	2	2	2	888	2	4
93	4	2	2	1	1	2.5	7	2	888	13	8	2	2	2	2	888	2	1
94	4	2	2	2	2	888	13	2	888	7	44	2	2	2	2	888	2	1
95	4	2	2	3	1	2.5	5	2	888	18	24	2	2	2	1	2	2	3
96	4	2	2	3	1	2.5	8	2	888	17	10	2	2	2	2	888	2	1
97	4	2	2	3	1	2.5	6	1	1	48	0	2	2	2	2	888	2	4
98	4	2	2	2	1	2.5	7	2	888	18	18	2	2	2	2	888	2	1
99	4	2	2	3	1	2.5	5	2	888	21	56	2	2	2	2	888	2	4
100	4	2	2	3	1	2.5	3	1	1	24	25	2	2	2	2	888	2	1
101	4	2	2	2	1	2.5	5	2	888	22	32	2	2	2	2	888	2	1
102	4	2	2	3	1	2.5	5	1	1	25	9	2	2	2	1	2	2	1
103	4	2	2	3	1	2.5	6	2	888	16	22	2	2	2	1	5	2	5
104	4	2	2	3	1	2.5	3	2	888	24	46	2	2	2	2	888	2	4
105	4	2	2	2	2	888	13	2	888	6	28	2	2	2	2	888	2	4
106	4	2	2	2	2	888	11	1	1	12	4	2	2	2	1	1	2	1
107	4	2	2	1	2	888	11	2	888	11	2	2	2	2	2	888	2	1
108	4	2	2	2	1	2.5	5	2	888	16	14	1	1	1	1	2	2	5

	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
109	4	2	2	2	1	7.5	5	2	888	18	35	2	2	2	2	888	2	4
110	4	2	2	2	1	2.5	8	2	888	13	46	2	2	2	1	2	2	1
111	4	2	2	3	1	2.5	5	2	888	21	45	2	2	2	2	888	2	4
112	4	2	2	1	2	888	8	2	888	9	11	2	2	2	2	888	2	4
113	4	2	2	3	1	2.5	5	2	888	19	7	1	1	2	1	2	2	5
114	4	2	2	2	2	888	11	2	888	13	13	2	2	2	1	2	2	1
115	4	2	2	1	1	2.5	8	2	888	13	38	2	2	2	2	888	2	5
116	4	2	2	3	1	7.5	6	2	888	29	10	2	2	2	1	2	2	5
117	4	2	2	1	1	2.5	6	2	888	7	49	2	2	2	2	888	2	1
118	4	2	2	2	2	888	13	2	888	7	10	2	2	2	2	888	2	4
119	4	2	2	3	1	2.5	5	2	888	19	27	2	2	2	2	888	2	1
120	4	2	2	2	1	2.5	5	2	888	13	33	2	2	2	2	888	2	1
121	4	2	2	2	1	2.5	6	2	888	18	23	2	2	2	1	2	2	1
122	3	2	2	3	1	2.5	6	2	888	20	52	2	2	2	1	4	2	5
123	4	2	2	1	2	888	7	1	1	7	40	2	2	2	1	2	2	1
124	4	2	2	3	1	2.5	6	1	1	25	44	2	2	2	1	2	2	1
125	4	2	2	2	1	2.5	3	1	1	25	31	1	1	2	1	4	2	3
126	4	2	2	1	2	888	12	2	888	10	14	2	2	2	2	888	2	1
127	4	2	2	3	1	7.5	6	2	888	29	25	2	2	2	1	2	2	1
128	4	2	2	2	1	2.5	5	2	888	18	0	1	1	2	1	2	2	4
129	4	2	2	2	2	888	3	2	888	11	9	1	1	1	1	4	2	1
130	4	2	2	2	1	7.5	6	2	888	22	39	1	1	2	1	4	2	5
131	4	2	2	2	1	2.5	5	2	888	17	11	2	2	2	1	2	2	1
132	4	2	2	3	2	888	888	2	888	15	54	2	2	2	2	888	2	2
133	4	2	2	2	1	2.5	9	2	888	14	57	2	2	2	1	2	2	4
134	4	2	2	3	1	2.5	9	1	1	14	50	2	2	2	2	888	2	1
135	4	2	2	3	1	2.5	6	2	888	15	3	2	2	2	2	888	2	1
136	4	2	2	2	1	2.5	7	2	888	12	14	1	1	2	1	2	2	1
137	4	2	2	3	1	2.5	5	2	888	25	21	1	1	2	1	2	2	4
138	4	2	2	2	2	888	5	2	888	18	17	2	2	2	1	5	2	2
139	4	2	2	3	1	2.5	8	1	1	19	47	2	2	2	1	2	2	1
140	4	2	2	2	1	2.5	5	2	888	19	22	2	2	2	2	888	2	4
141	4	2	2	1	1	7.5	7	2	888	23	5	1	1	2	1	2	2	1
142	4	2	2	2	2	888	6	2	888	13	20	2	2	2	1	2	2	1
143	4	2	2	2	1	7.5	6	2	888	25	3	2	2	2	2	888	2	1
144	4	2	2	2	1	2.5	7	2	888	15	42	2	1	2	1	7	2	1

	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
145	4	2	2	1	1	2.5	8	2	888	13	32	2	2	2	2	888	2	1
146	4	2	2	2	1	7.5	6	2	888	24	50	2	2	2	2	888	2	1
147	4	2	2	3	1	2.5	3	2	888	24	35	2	2	2	2	888	2	4
148	4	2	2	3	1	2.5	5	2	888	22	10	2	2	2	2	888	2	1
149	4	2	2	1	1	7.5	7	1	1	15	29	2	2	2	2	888	2	1
150	4	2	2	2	1	2.5	10	2	888	21	2	2	2	2	1	2	2	1
151	4	2	2	2	1	2.5	5	1	1	20	39	1	1	2	1	2	2	1
152	4	2	2	2	1	2.5	6	2	888	15	52	2	2	2	2	888	2	4
153	4	2	2	1	1	2.5	5	2	888	12	58	1	1	1	1	2	2	5
154	4	2	2	2	1	2.5	13	2	888	22	14	2	2	2	1	7	2	1
155	4	2	2	3	1	2.5	6	1	1	12	50	2	2	2	2	888	2	1
156	4	2	1	2	1	2.5	6	1	1	17	24	2	2	2	1	2	2	1
157	4	2	2	3	1	7.5	4	2	888	27	28	2	2	2	2	888	2	4
158	4	2	2	3	1	2.5	5	2	888	22	7	2	2	2	1	2	2	2
159	4	2	2	1	2	888	8	2	888	8	24	2	2	2	2	888	2	4
160	4	2	2	2	1	2.5	6	2	888	13	57	2	2	2	2	888	2	4
161	4	2	2	2	2	888	5	2	888	9	40	2	2	2	2	888	2	1
162	4	2	2	3	1	2.5	10	2	888	15	55	2	2	2	2	888	2	1
163	4	2	2	2	1	2.5	7	2	888	19	23	2	2	2	1	2	2	1
164	4	2	2	3	1	2.5	4	2	888	22	53	1	1	2	1	2	2	1
165	4	2	2	3	1	2.5	6	2	888	16	27	1	1	2	1	2	2	4
166	4	2	2	2	1	2.5	7	2	888	12	50	2	2	2	2	888	2	1
167	4	2	2	2	2	888	13	2	888	10	11	2	2	2	2	888	2	1
168	4	2	2	1	2	888	13	2	888	6	37	2	2	2	2	888	2	1
169	4	2	2	3	2	888	13	2	888	16	52	2	2	2	2	888	2	4
170	2	1	2	2	1	7.5	5	1	1	25	53	2	2	2	1	2	2	1
171	4	2	2	2	1	2.5	5	2	888	20	23	2	2	2	1	2	2	1
172	4	2	2	2	1	2.5	5	2	888	17	22	1	1	2	1	2	2	1
173	4	2	2	3	1	2.5	5	2	888	22	10	1	1	1	1	4	2	5
174	4	2	2	3	1	2.5	7	2	888	25	12	2	2	2	1	2	2	1
175	4	2	2	2	1	2.5	8	2	888	21	13	2	2	2	2	888	2	4
176	4	2	2	3	2	888	7	1	1	20	16	2	2	2	1	2	2	1
177	4	2	2	2	1	7.5	5	2	888	17	28	2	2	2	1	2	2	1
178	4	2	2	2	2	888	13	2	888	10	22	2	2	2	2	888	2	4
179	4	2	2	2	1	2.5	4	2	888	16	9	2	2	2	1	2	2	1
180	4	2	2	2	1	2.5	7	2	888	22	53	2	2	2	2	888	2	4

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182	4	2	2	3	1	2.5	6	2	888	24	39	2	2	2	2	888	2	1
183	4	2	2	2	1	7.5	5	2	888	25	27	2	2	2	2	888	2	4
184	4	2	2	2	2	888	5	2	888	15	6	2	2	2	1	2	2	2
185	4	2	2	2	2	888	10	2	888	17	18	2	2	2	2	888	2	1
186	4	2	2	2	2	888	10	2	888	12	18	2	2	2	2	888	2	5
187	4	2	2	2	1	2.5	6	2	888	25	12	2	2	2	1	2	2	1
188	4	2	2	1	1	2.5	5	2	888	19	32	2	2	2	1	2	2	4
189	4	2	2	1	1	2.5	5	2	888	12	57	2	2	2	1	2	2	1
190	4	2	2	3	1	2.5	6	2	888	21	8	2	2	2	2	888	2	4
191	4	2	2	3	1	2.5	5	2	888	21	0	2	2	2	2	888	2	1
192	4	2	2	3	1	2.5	5	2	888	26	0	1	1	2	1	2	2	1
193	4	2	2	3	1	2.5	5	2	888	26	2	2	2	2	1	7	2	4
194	4	2	2	3	1	2.5	4	2	888	20	8	1	2	2	2	888	2	1
195	4	2	2	3	1	2.5	6	1	1	17	15	2	2	2	1	2	2	2
196	4	2	2	2	1	2.5	5	2	888	16	53	2	2	2	2	888	2	5
197	4	2	2	2	1	2.5	6	2	888	16	28	2	2	2	2	888	2	1
198	4	2	2	3	2	888	6	2	888	15	17	2	2	2	2	888	2	2
199	4	2	2	3	1	2.5	5	2	888	24	38	2	2	2	1	6	2	1
200	4	2	2	2	2	888	5	2	888	16	43	2	2	2	1	2	2	1
201	4	2	2	3	2	888	13	2	888	18	49	2	2	2	2	888	2	1
202	4	2	2	3	1	2.5	7	1	1	19	0	2	2	2	1	2	2	1
203	4	2	2	3	1	2.5	6	2	888	20	22	2	2	2	1	2	2	1
204	4	2	2	2	2	888	13	2	888	7	36	2	2	2	2	888	2	4
205	4	2	2	2	2	888	10	2	888	11	50	2	2	2	2	888	2	1
206	4	2	2	2	2	888	13	2	888	6	37	2	2	2	2	888	2	1
207	4	2	2	3	2	888	3	1	1	17	32	2	2	2	1	2	2	4
208	4	2	2	2	2	888	13	2	888	9	20	2	2	2	2	888	2	4
209	4	2	2	2	1	2.5	6	2	888	26	0	2	2	2	2	888	2	1
210																		
211	4	2	2	2	1	2.5	4	1	1	17	37	2	2	2	2	888	2	1
212	4	2	2	3	1	2.5	3	2	888	26	0	2	2	2	1	2	2	5
213	4	2	2	2	2	888	9	1	1	16	4	1	1	1	1	2	2	1
214	4	2	2	1	2	888	11	2	888	10	20	2	2	2	1	2	2	1
215																		
216	4	2	2	3	1	7.5	5	2	888	23	20	2	2	2	1	2	2	1

	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
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218	4	2	2	1	1	2.5	8	2	888	5	47	2	2	2	2	888	2	1
219	4	2	2	3	1	2.5	6	2	888	16	42	2	2	2	2	888	2	1
220	4	2	2	3	1	2.5	5	1	1	19	46	1	1	2	1	4	2	1
221	4	2	2	1	1	2.5	5	2	888	15	33	2	2	2	2	888	2	1
222	4	2	2	2	1	7.5	8	2	888	25	43	1	1	2	1	6	2	1
223	4	2	2	1	1	2.5	6	2	888	8	44	2	2	2	2	888	2	5
224	4	2	2	3	1	2.5	4	2	888	18	8	2	2	2	2	888	2	1
225	4	2	2	3	1	3	5	2	888	23	6	2	2	2	2	888	2	1
226	4	2	2	3	1	15	5	1	1	34	27	1	1	2	1	2	2	1
227	4	2	2	3	1	15	6	1	1	35	0	2	2	2	2	888	2	1
228	4	2	2	3	2	888	10	2	888	15	57	2	2	2	2	888	2	1
229	4	2	2	3	1	2.5	6	2	888	19	34	2	2	2	2	888	2	1
230	4	2	2	1	1	2.5	5	2	888	16	16	2	2	2	2	888	2	1
231	4	2	2	3	1	7.5	3	2	888	18	29	1	2	2	2	888	2	1
232	4	2	2	3	1	2.5	5	2	888	20	57	2	2	2	1	2	2	4
233	4	2	2	2	1	7.5	5	2	888	21	24	2	2	2	2	888	2	5
234	4	2	2	2	1	2.5	9	2	888	17	54	2	2	2	2	888	2	1
235	4	2	2	3	2	888	6	2	888	16	31	2	2	2	2	888	2	1
236	4	2	2	3	2	888	2	2	888	13	30	2	2	2	2	888	2	5
237	4	2	2	1	1	2.5	6	1	1	20	40	2	2	2	2	888	2	1
238	4	2	2	1	1	7.5	6	2	888	22	0	2	2	2	2	888	2	1
239	4	2	2	1	1	2.5	7	2	888	22	12	2	2	2	1	2	2	3
240	4	2	2	3	1	2.5	9	2	888	19	28	2	2	2	2	888	2	5
241	4	2	2	3	2	888	6	2	888	19	27	1	2	2	1	2	2	1
242	4	2	2	2	2	888	13	2	888	12	48	2	2	2	2	888	2	1
243	4	2	2	3	1	2.5	4	2	888	21	45	2	2	2	1	888	2	1
244	4	2	2	2	1	2.5	5	2	888	18	1	2	2	2	1	5	2	5
245	4	2	2	2	1	2.5	4	2	888	20	0	2	2	2	1	2	2	4
246	4	2	2	2	2	888	10	2	888	12	32	2	2	4	2	888	2	4
247	4	2	2	1	1	2.5	5	2	888	18	34	2	2	2	1	2	2	1
248	4	2	2	1	2	888	13	2	888	8	23	2	2	2	2	888	2	1
249	4	2	2	1	1	2.5	4	2	888	17	42	1	2	2	1	2	2	5
250	4	2	2	2	2	888	11	1	1	9	36	2	2	2	1	2	2	2
251	4	2	2	3	1	7.5	5	2	888	25	50	2	2	2	2	888	2	1
252	4	2	2	2	1	2.5	5	2	888	24	45	1	1	2	1	4	2	5



	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
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254	4	2	2	2	1	2.5	5	1	1	14	45	2	2	2	1	2	2	1
255	4	2	2	2	2	888	13	2	888	11	6	2	2	2	2	888	2	1
256	4	2	2	2	2	888	13	2	888	12	57	2	2	2	1	2	2	1
257	4	2	2	2	2	888	13	2	888	9	36	2	2	2	2	888	2	5
258	4	2	2	3	1	7.5	3	1	1	24	29	2	2	2	1	2	2	5
259	4	2	2	1	1	2.5	7	2	888	15	42	1	1	1	1	4	2	1
260	4	2	2	1	1	2.5	13	1	1	9	50	2	2	2	2	888	2	1
261	4	2	2	1	1	2.5	7	1	1	16	13	1	2	2	1	2	2	1
262	4	2	2	2	2	888	6	2	888	10	12	2	2	2	2	888	2	5
263	4	2	2	3	1	2.5	5	2	888	16	52	2	2	2	1	2	2	5
264	4	2	2	2	1	2.5	8	2	888	11	41	2	2	2	2	888	2	1
265	4	2	2	2	2	888	5	1	1	19	23	2	2	2	1	5	2	5
266	4	2	2	3	1	2.5	5	2	888	18	55	2	2	2	1	2	2	1
267	4	2	2	3	1	7.5	5	2	888	28	47	1	1	2	1	4	2	4
268	4	2	2	2	1	2.5	5	2	888	15	55	2	2	2	2	888	2	5
269	4	2	2	3	1	2.5	5	2	888	18	26	2	2	2	2	888	2	1
270	4	2	2	2	1	2.5	5	2	888	14	11	2	2	2	2	888	2	4
271	4	2	2	2	2	888	12	2	888	9	22	2	2	2	2	888	2	1
272	4	2	2	1	2	888	9	1	1	10	10	2	2	2	2	888	2	1
273	4	2	2	2	1	7.5	6	2	888	18	50	2	2	2	2	888	2	1
274	4	2	2	2	2	888	6	2	888	13	2	2	2	2	2	888	2	1
275	4	2	2	3	1	2.5	5	2	888	25	7	2	2	2	1	2	2	1
276	4	2	2	2	1	2.5	5	2	888	12	43	2	2	2	1	2	2	4
277	3	2	2	3	1	2.5	5	2	888	19	0	2	2	2	1	2	2	5
278	4	2	2	3	1	7.5	5	2	888	26	40	2	2	2	2	888	2	1
279	4	2	2	1	1	7.5	6	2	888	23	3	1	2	2	1	5	1	1
280	4	2	2	3	1	2.5	5	2	888	20	17	2	2	2	1	2	2	1
281	4	2	2	2	1	2.5	8	2	888	14	57	2	2	2	2	888	2	1
282	4	2	2	2	2	888	8	2	888	14	6	2	2	2	2	888	2	5
283	4	2	2	3	1	15	5	2	888	30	19	1	1	1	1	2	2	4
284	4	2	2	2	1	2.5	5	2	888	23	25	2	2	2	1	2	2	5
285	4	2	2	3	1	7.5	5	2	888	22	0	2	2	2	1	2	2	1
286	4	2	2	2	2	888	10	2	888	23	30	2	2	2	1	2	2	1
287	4	2	2	1	1	2.5	7	2	888	9	36	2	2	2	1	2	2	1
288	4	2	2	2	1	7.5	6	2	888	26	0	2	2	2	1	2	2	1

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289	4	2	2	3	1	2.5	5	2	888	21	37	2	2	2	1	2	2	3
290	4	2	2	2	2	888	3	2	888	5	38	1	1	1	1	2	2	2
291	4	2	2	3	1	2.5	1	2	888	21	0	2	2	2	1	2	2	4
292	4	2	2	3	1	7.5	2	2	888	27	33	2	2	2	2	888	2	1
293	4	2	2	2	1	2.5	8	2	888	19	0	2	2	2	2	888	2	1
294	4	2	2	2	1	2.5	8	2	888	16	47	1	1	2	1	2	2	1
295	4	2	2	2	1	2.5	8	2	888	18	25	2	2	2	2	888	2	1
296	4	2	2	2	2	2.5	5	2	888	20	0	2	2	2	1	2	2	5
297	4	2	2	3	1	2.5	5	2	888	19	37	2	2	2	1	2	2	5
298	4	2	2	3	1	2.5	5	2	888	21	1	2	2	2	2	888	2	1
299	4	2	2	2	1	2.5	8	2	888	16	6	2	2	2	2	888	2	1
300	4	2	2	1	1	2.5	7	2	888	14	34	1	1	2	1	7	2	1
301	4	2	2	3	1	2.5	5	1	1	21	47	2	2	2	1	2	2	1
302	4	2	2	3	1	2.5	7	2	888	17	32	2	2	2	1	2	2	1
303	4	2	2	3	1	2.5	5	2	888	18	9	2	2	2	1	2	2	1
304	4	2	2	3	2	888	8	2	888	16	1	2	2	2	1	2	2	1
305	4	2	2	1	1	2.5	8	2	888	11	17	2	2	2	2	888	2	4
306	4	2	2	1	1	2.5	5	2	888	16	42	2	2	2	2	888	2	4
307	4	2	2	1	1	7.5	5	2	888	17	6	2	2	2	1	2	2	2
308	4	2	2	1	1	2.5	5	2	888	10	38	2	2	2	2	888	2	5
309	4	2	2	3	1	2.5	5	2	888	24	21	2	2	2	1	2	2	1
310	4	2	2	3	1	2.5	5	2	888	12	0	2	2	2	2	888	2	1
311	4	2	2	2	1	2.5	10	2	888	13	18	2	2	2	1	2	2	1
312	4	2	2	1	1	2.5	5	1	1	18	0	2	2	2	1	2	2	1
313	4	2	2	3	2	888	13	2	888	11	51	2	2	2	2	888	2	1
314	4	2	2	3	1	2.5	5	2	888	18	37	2	2	2	1	2	2	1
315	4	2	2	3	1	2.5	5	2	888	32	0	2	2	2	1	2	2	1
316	4	2	2	3	1	7.5	5	2	888	24	31	2	2	2	2	888	2	4
317	4	2	2	1	1	2.5	8	2	888	9	26	2	2	2	2	888	2	4
318	4	2	2	3	1	2.5	5	2	888	20	2	2	2	2	1	2	2	1
319	4	2	2	2	1	2.5	8	2	888	18	6	2	2	2	2	888	2	5
320	4	2	2	2	1	7.5	5	2	888	24	18	2	2	2	1	2	2	5
321	4	2	2	2	1	7.5	7	2	888	22	38	2	2	2	2	888	2	4
322	4	2	2	2	2	888	13	2	888	10	15	2	2	2	2	888	2	4
323	4	2	2	3	1	7.5	2	2	888	37	42	2	2	2	2	888	2	1
324	4	2	2	2	1	2.5	10	2	888	22	6	2	2	2	1	2	2	4

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326	4	2	2	3	1	2.5	7	2	888	19	8	2	2	2	2	888	2	5
327	4	2	2	2	1	2.5	9	2	888	10	23	2	2	2	2	888	2	1
328	4	2	2	2	1	2.5	7	2	888	9	44	2	2	2	2	888	2	4
329	4	2	2	3	1	7.5	6	2	888	25	22	2	2	2	1	2	2	3
330	4	2	2	2	1	2.5	6	2	888	13	47	2	2	2	2	888	2	1
331	4	2	2	3	1	2.5	5	2	888	24	27	2	2	2	2	888	2	2
332	4	2	2	3	1	2.5	3	2	888	26	16	2	2	2	2	888	2	3
333	4	2	2	3	1	2.5	2	2	888	21	29	2	2	2	1	2	2	1
334	4	2	2	3	1	2.5	7	2	888	17	28	2	2	2	2	888	2	5
335	4	2	2	2	1	2.5	5	2	888	14	45	2	2	2	2	888	2	1
336	4	2	2	1	1	2.5	5	2	888	9	13	2	2	2	2	888	2	4
337	4	2	2	1	1	2.5	5	2	888	15	23	2	2	2	1	2	2	1
338	4	2	2	3	1	7.5	3	2	888	26	14	2	2	2	1	2	2	1
339	4	2	2	2	1	2.5	9	2	888	16	0	2	2	2	2	888	2	1
340	4	2	2	3	1	7.5	2	2	888	28	30	2	2	2	2	888	2	4
341	4	2	2	2	2	888	13	2	888	13	0	2	2	2	1	2	2	4
342	4	2	2	3	1	7.5	7	1	1	28	15	1	1	2	1	2	2	4
343	4	2	2	2	1	7.5	5	2	888	16	32	2	2	2	2	888	2	3
344	4	2	2	1	1	2.5	5	2	888	21	59	2	2	2	1	2	2	1
345	4	2	2	2	2	888	6	2	888	12	48	2	2	2	2	888	2	5
346	4	2	2	2	1	2.5	5	2	888	22	46	2	2	2	2	888	2	3
347	4	2	2	1	1	2.5	7	2	888	17	6	2	2	2	2	888	2	3
348	4	2	2	2	2	888	5	2	888	10	48	2	2	2	1	2	2	1
349	4	2	2	3	1	2.5	5	2	888	25	16	2	2	2	2	888	2	1
350	4	2	2	3	1	7.5	5	2	888	33	38	2	2	2	2	888	2	1
351	4	2	2	2	1	2.5	5	2	888	13	0	2	2	2	2	888	2	1
352	4	2	2	3	1	7.5	5	2	888	22	22	2	2	2	2	888	2	5
353	4	2	2	1	1	2.5	7	2	888	13	13	2	2	2	2	888	2	4
354	4	2	2	3	2	888	13	2	888	10	11	2	2	2	2	888	2	4
355	4	2	2	3	1	2.5	5	2	888	23	18	1	2	2	2	888	2	1
356	4	2	2	2	1	2.5	6	2	888	21	8	2	2	2	1	2	2	5
357	4	2	2	3	1	2.5	5	2	888	22	22	2	2	2	1	2	2	2
358	4	2	2	2	1	2.5	6	2	888	14	35	1	1	1	1	2	2	5
359	4	2	2	3	1	2.5	5	2	888	20	15	2	2	2	1	2	2	5
360	4	2	2	2	1	2.5	7	2	888	21	0	2	2	2	2	888	2	1

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362																		
363	4	2	2	2	2	888	5	1	1	8	10	2	2	2	1	2	2	2
364	4	2	2	1	1	2.5	5	2	888	18	49	2	2	2	1	2	2	4
365	4	2	2	2	1	2.5	6	2	888	17	0	2	2	2	1	2	2	4
366	4	2	2	2	1	2.5	5	2	888	21	5	2	2	2	2	888	2	2
367	4	2	2	3	1	2.5	5	2	888	19	30	2	2	2	1	2	2	1
368	4	2	2	3	1	2.5	5	2	888	22	5	2	2	2	1	2	2	1
369	4	2	2	2	2	888	12	2	888	7	40	2	2	2	2	888	2	4
370	4	2	2	3	1	2.5	7	2	888	17	24	2	2	2	1	2	2	4
371	4	2	2	2	1	2.5	10	2	888	22	15	2	2	2	2	888	2	1
372	4	2	2	2	2	888	13	2	888	11	27	2	2	2	2	888	2	1
373	4	2	2	2	1	2.5	5	2	888	18	36	2	2	2	2	888	2	4
374	4	2	2	2	2	888	7	2	888	11	40	2	2	2	2	888	2	4
375	4	2	2	3	2	888	11	2	888	14	30	2	2	2	2	888	2	1
376	4	2	2	2	1	2.5	5	2	888	12	10	1	2	2	2	888	2	1
377	4	2	2	1	1	7.5	5	2	888	28	17	2	2	2	2	888	2	1
378	4	2	2	2	2	888	5	1	2	9	49	2	2	2	1	5	2	1
379	4	2	2	3	2	888	5	2	888	13	33	1	1	2	1	2	2	1
380																		
381	4	2	2	3	1	2.5	5	2	888	15	37	1	1	2	1	2	2	2
382	4	2	2	1	1	2.5	6	2	888	13	44	2	2	2	2	888	2	1
383	4	2	2	2	1	2.5	5	2	888	18	45	1	1	2	1	2	2	1
384	4	2	2	3	1	7.5	5	2	888	16	0	1	1	1	1	2	2	4
385	4	2	2	3	1	7.5	5	2	888	23	5	2	2	2	2	888	2	4
386	4	2	2	3	2	888	13	2	888	14	46	2	2	2	2	888	2	5
387	4	2	2	3	1	2.5	7	2	888	20	14	2	2	2	1	2	2	4
388	4	2	2	3	2	888	4	1	1	14	57	1	1	2	1	6	2	4
389	4	2	2	3	1	7.5	4	2	888	21	59	2	2	2	2	888	2	5
390	4	2	2	2	1	2.5	10	2	888	16	24	2	2	2	1	2	2	1
391	4	2	2	1	1	2.5	5	2	888	16	0	2	2	2	2	888	2	5
392	4	2	2	2	2	888	10	2	888	16	30	1	1	1	1	4	2	1
393																		
394	4	2	2	2	1	2.5	5	2	888	18	0	2	2	2	2	888	2	5
395	4	2	2	3	1	2.5	5	1	1	25	18	2	2	2	1	5	1	5
396	4	2	2	3	1	7.5	3	2	888	14	51	2	2	2	2	888	2	1

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398	4	2	2	1	1	2.5	7	2	888	16	12	2	2	2	2	888	2	5
399	4	2	2	1	1	2.5	5	2	888	21	56	2	2	2	2	888	2	4
400	4	2	2	2	1	2.5	5	2	888	10	1	1	1	2	1	4	2	5
401	4	2	2	3	1	2.5	5	2	888	22	24	2	2	2	2	888	2	4
402	4	2	2	3	2	888	7	2	888	13	59	2	2	2	1	2	2	1
403	4	2	2	2	1	2.5	5	2	888	19	43	1	1	2	2	888	2	4
404	4	2	2	3	1	7.5	5	2	888	16	38	2	2	2	2	888	2	1
405	4	2	2	2	2	888	3	1	2	7	46	2	2	2	1	5	1	1
406	4	2	2	2	1	7.5	4	2	888	26	23	2	2	2	2	888	2	1
407	4	2	2	3	1	7.5	5	2	888	10	3	2	2	2	1	2	2	1
408	4	2	2	3	1	2.5	10	2	888	10	4	2	2	2	1	2	2	1
409	4	2	2	3	1	7.5	5	2	888	24	14	2	2	2	2	888	2	2
410	4	2	2	3	1	2.5	3	2	888	24	13	2	2	2	1	2	2	1
411																		
412	4	2	2	3	2	888	5	2	888	19	29	2	2	2	2	888	2	2
413	4	2	2	2	1	2.5	5	2	888	20	12	2	2	2	2	888	2	4
414	4	2	2	1	1	2.5	7	2	888	18	57	2	2	2	2	888	2	1
415	4	2	2	3	1	2.5	3	2	888	22	31	2	2	2	1	4	2	1
416	4	2	2	1	2	888	13	2	888	10	27	2	2	2	2	888	2	1
417	4	2	2	1	1	2.5	9	2	888	14	38	2	2	2	2	888	2	1
418	4	2	2	3	1	2.5	6	1	1	19	41	2	2	2	2	888	2	4
419	4	2	2	1	1	2.5	5	2	888	19	39	1	2	2	2	888	2	4
420	4	2	2	1	2	888	13	2	888	8	14	2	2	2	2	888	2	2
421	4	2	2	2	2	888	6	2	888	13	55	2	2	2	1	2	2	1
422	4	2	2	2	1	2.5	5	2	888	25	23	2	2	2	1	2	2	1
423	4	2	2	2	1	2.5	5	2	888	24	38	2	2	2	2	888	2	4
424	4	2	2	1	2	888	13	2	888	13	22	2	2	2	2	888	2	4
425																		
426	4	2	2	2	1	2.5	5	2	888	18	45	2	2	2	1	2	2	5
427	4	2	2	2	1	2.5	5	2	888	17	1	2	2	2	2	888	2	1
428	4	2	2	2	1	2.5	5	2	888	23	11	1	2	2	2	888	2	4
429	4	2	2	3	1	7.5	4	2	888	27	30	2	2	2	2	888	2	1
430	4	2	2	1	1	2.5	5	2	888	27	38	1	2	2	2	888	2	1
431	4	2	2	3	1	7.5	5	2	888	26	0	1	1	2	1	4	2	1
432	4	2	2	3	1	2.5	6	2	888	18	45	2	2	2	1	2	2	1

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434	4	2	2	2	1	2.5	5	2	888	17	46	2	2	2	2	888	2	3
435	4	2	2	3	1	7.5	5	2	888	26	6	2	2	2	2	888	2	4
436	4	2	2	3	1	7.5	2	2	888	17	20	2	2	2	2	888	2	1
437	4	2	2	3	1	7.5	5	2	888	27	12	2	2	2	1	2	2	1
438	4	2	2	2	1	2.5	5	2	888	21	14	2	2	2	1	2	2	1
439	4	2	2	2	2	888	13	2	888	5	45	2	2	2	2	888	2	4
440	4	2	2	3	2	888	13	2	888	10	33	2	2	2	2	888	2	1
441	4	2	2	2	1	7.5	4	1	1	21	11	2	2	2	1	2	2	1
442	4	2	2	3	2	888	13	2	888	15	32	2	2	2	2	888	2	4
443	4	2	2	3	1	2.5	6	2	888	25	24	1	1	2	1	2	2	1
444	4	2	2	3	1	7.5	4	2	888	32	3	2	2	2	2	888	2	4
445	4	2	2	3	1	2.5	5	2	888	25	44	1	1	2	1	2	2	1
446	4	2	2	2	1	2.5	4	2	888	16	40	2	2	2	1	2	2	5
447	4	2	2	1	1	7.5	5	2	888	24	45	2	2	2	2	888	2	1
448																		
449	4	2	2	2	1	2.5	7	2	888	17	23	2	2	2	2	888	2	1
450	4	2	2	1	1	2.5	6	2	888	10	54	1	2	2	2	888	2	1
451	4	2	2	3	1	2.5	5	2	888	21	35	2	2	2	2	888	2	1
452	1	1	2	3	1	2.5	4	1	1	22	12	2	2	2	1	2	2	5
453	2	2	2	2	1	2.5	6	2	888	20	10	1	1	2	1	4	2	1
454	4	2	2	2	1	7.5	5	1	1	25	3	2	2	2	2	888	2	1
455	4	2	2	2	2	888	5	1	1	9	56	2	2	2	2	888	2	1
456	3	2	2	3	1	2.5	4	1	1	17	3	1	1	1	1	2	2	1
457	4	2	2	3	1	2.5	5	2	888	21	29	2	2	2	1	2	2	4
458	4	2	2	3	1	2.5	5	2	888	21	14	2	2	2	1	2	2	1
459	4	2	2	2	2	888	13	2	888	7	45	2	2	2	2	888	2	1
460	4	2	2	3	1	2.5	5	2	888	22	5	1	1	1	1	2	2	1
461	4	2	2	3	2	888	13	2	888	11	40	2	2	2	2	888	2	1
462	4	2	2	3	1	2.5	5	2	888	19	36	2	2	2	2	888	2	1
463	4	2	2	2	1	2.5	5	2	888	23	21	2	2	2	2	888	2	1
464	4	2	2	3	1	2.5	4	1	1	19	27	1	1	2	1	2	2	1
465	4	2	2	3	1	2.5	4	1	1	17	27	2	2	2	1	2	2	1
466	4	2	2	2	1	2.5	9	2	888	17	49	2	2	2	1	2	2	1
467	4	2	2	3	1	2.5	5	2	888	16	20	2	2	2	2	888	2	5
468	4	2	2	3	2	888	13	2	888	11	14	2	2	2	2	888	2	1

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470	4	2	2	3	1	2.5	6	2	888	21	13	2	2	2	1	2	2	4
471	4	2	2	2	2	888	11	2	888	12	10	2	2	2	2	888	2	3
472	4	2	2	3	1	2.5	5	2	888	18	36	2	2	2	2	888	2	4
473	4	2	2	1	1	2.5	5	1	1	11	32	2	2	2	2	888	2	1
474	4	2	2	1	1	2.5	7	2	888	14	10	2	2	2	1	2	2	1
475	4	2	2	1	2	888	11	2	888	9	12	2	2	2	2	888	2	1
476	4	2	2	3	2	888	6	1	1	20	9	2	2	2	2	888	2	1
477	4	2	2	1	1	2.5	7	2	888	22	0	2	2	2	2	888	2	1
478	4	2	2	1	2	888	11	2	888	6	6	2	2	2	2	888	2	1
479	4	2	2	2	2	2.5	3	2	888	20	33	2	2	2	2	888	2	1
480	4	2	2	2	1	2.5	7	2	888	15	57	2	2	2	1	2	2	5
481	4	2	2	1	1	2.5	5	1	888	22	35	2	2	2	2	888	2	5
482	4	2	2	1	1	2.5	5	2	888	10	54	2	2	2	2	888	2	3
483	4	2	2	1	2	888	11	2	888	12	0	2	2	2	2	888	2	5
484	4	2	2	2	1	2.5	6	2	888	16	19	2	2	2	1	2	2	5
485	4	2	2	3	1	7.5	5	2	888	24	15	2	2	2	1	2	2	1
486	4	2	2	2	1	2.5	6	2	888	15	33	2	2	2	2	888	2	3
487	4	2	2	3	2	888	888	2	888	26	27	2	2	2	2	888	2	5
488	4	2	2	2	1	2.5	12	2	888	14	57	2	2	2	1	2	2	1
489	4	2	2	1	1	2.5	7	1	1	21	46	2	2	2	2	888	2	1
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491	4	2	2	1	2	888	12	2	888	7	15	2	2	2	2	888	2	1
492	4	2	2	3	1	7.5	2	2	888	24	53	2	2	2	2	888	2	2
493	4	2	2	2	1	2.5	7	2	888	12	16	2	2	2	2	888	2	1
494	4	2	2	3	2	888	13	2	888	14	5	2	2	2	2	888	2	1
495	4	2	2	2	1	2.5	5	2	888	13	0	2	2	2	2	888	2	4
496	4	2	2	3	1	2.5	5	2	888	21	0	2	2	2	1	2	2	4
497	4	2	2	2	2	888	13	2	888	6	30	2	2	2	2	888	2	1
498	4	2	2	2	1	2.5	5	1	1	19	22	2	2	2	1	2	2	4
499	4	2	2	2	1	2.5	5	2	888	21	21	2	2	2	1	2	2	5
500	4	2	2	3	1	7.5	5	2	888	26	35	2	2	2	1	2	2	1
501	4	2	2	1	2	888	8	2	888	7	12	2	2	2	2	888	2	1
502	4	2	2	1	1	2.5	5	1	1	9	1	2	2	2	2	888	2	1
503	4	2	2	2	2	888	13	2	888	6	0	2	2	2	2	888	2	3
504	4	2	2	3	1	2.5	5	2	888	19	11	2	2	2	1	2	2	3

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506	4	2	2	1	2	888	3	1	1	5	4	2	2	2	1	5	2	2
507	4	2	2	1	2	888	888	2	888	6	35	2	2	2	2	888	2	1
508	4	2	2	1	1	2.5	7	2	888	7	39	2	2	2	2	888	2	5
509	4	2	2	3	1	2.5	8	2	888	19	48	2	2	2	2	888	2	1
510	4	2	2	1	1	2.5	7	2	888	20	43	2	2	2	2	888	2	4
511	4	2	2	3	1	2.5	5	1	1	18	10	2	2	2	2	888	2	4
512	4	2	2	1	2	888	888	2	888	11	28	2	2	2	2	888	2	4
513	4	2	2	3	1	2.5	5	2	888	26	47	2	2	2	2	888	2	4
514	4	2	2	3	1	2.5	6	2	888	20	0	2	2	2	2	888	2	3
515	4	2	2	3	1	2.5	6	2	888	26	24	1	2	2	1	2	2	4
516	4	2	2	1	1	2.5	5	2	888	14	6	2	2	2	2	888	2	1
517	4	2	2	2	1	2.5	8	1	1	12	37	2	2	2	1	2	2	1
518	4	2	2	3	1	7.5	5	2	888	26	52	2	2	2	2	888	2	1
519	4	2	2	3	1	2.5	5	2	888	21	13	2	2	2	1	2	2	1
520	4	2	2	3	1	2.5	6	2	888	16	48	1	2	2	2	888	2	1
521	4	2	2	2	1	2.5	6	2	888	15	6	2	2	2	2	888	2	1
522	4	2	2	3	2	888	5	2	888	13	20	2	2	2	1	2	2	5
523	4	2	2	2	2	888	7	2	888	16	44	1	1	1	1	4	2	1
524	4	2	2	3	1	2.5	5	2	888	19	21	2	2	2	1	2	2	1
525	4	2	2	3	1	7.5	2	2	888	27	27	2	2	2	1	2	2	5
526	4	2	2	1	2	888	10	2	888	5	56	2	2	2	2	888	2	5
527	4	2	2	3	1	2.5	2	2	888	20	9	2	2	2	2	888	2	5
528	4	2	2	3	2	888	7	2	888	18	33	2	2	2	2	888	2	1
529	4	2	2	2	1	2.5	5	2	888	18	49	2	2	2	2	888	2	1
530	4	2	2	3	2	888	13	2	888	12	41	2	2	2	2	888	2	1
531	4	2	2	3	1	2.5	5	2	888	15	27	2	2	2	2	888	2	5
532	4	2	2	3	1	7.5	5	2	888	21	44	2	2	2	2	888	2	1
533	4	2	2	2	1	2.5	6	2	888	14	19	2	2	2	1	2	2	1
534	4	2	2	2	1	2.5	5	1	1	30	38	2	2	2	1	5	2	1
535	4	2	2	1	1	2.5	5	2	888	10	39	2	2	2	1	2	2	2
536	4	2	2	3	1	2.5	5	2	888	17	22	2	2	2	2	888	2	5
537	4	2	2	3	1	7.5	5	2	888	26	0	2	2	2	1	2	2	1
538	4	2	2	2	1	7.5	5	2	888	22	47	2	2	2	2	888	2	1
539	4	2	2	2	2	888	5	2	888	9	57	2	2	2	2	888	2	3
540	4	2	2	2	1	2.5	5	2	888	15	11	2	2	2	2	888	2	1



	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
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542	4	2	2	2	1	2.5	5	2	888	19	47	2	2	2	2	888	2	5
543	4	2	2	3	1	7.5	5	2	888	29	10	2	2	2	2	888	2	2
544	4	2	2	2	1	2.5	9	2	888	14	57	2	2	2	2	888	2	5
545	4	2	2	1	1	2.5	7	2	888	10	49	2	2	2	2	888	2	1
546	4	2	2	3	1	7.5	2	2	888	24	21	2	2	2	2	888	2	1
547	4	2	2	1	1	2.5	9	2	888	14	17	2	2	2	2	888	2	4
548	4	2	2	3	1	7.5	3	2	888	26	13	2	2	2	1	2	2	2
549	4	2	2	3	1	7.5	5	2	888	23	13	2	2	2	2	888	2	1
550	4	2	2	3	1	2.5	6	2	888	22	25	2	2	2	2	888	2	1
551	4	2	2	2	2	888	5	2	888	8	44	2	2	2	1	3	2	4
552	4	2	2	1	1	2.5	9	2	888	10	0	2	2	2	2	888	2	1
553	2	2	2	3	1	7.5	6	2	888	20	47	2	2	2	2	888	2	5
554	4	2	2	3	1	7.5	3	1	1	26	33	1	1	2	1	2	2	2
555	4	2	2	3	1	2.5	9	2	888	13	38	2	2	2	2	888	2	1
556	2	2	2	3	1	7.5	4	1	1	19	25	2	2	2	2	888	2	1
557	4	2	2	1	1	2.5	7	2	888	9	39	2	2	2	2	888	2	1
558	4	2	2	2	1	2.5	6	2	888	19	30	2	2	2	2	888	2	1
559	4	2	2	3	1	2.5	5	2	888	15	32	2	2	2	2	888	2	4
560	2	2	2	3	1	7.5	5	2	888	18	25	2	2	2	2	888	2	1
561	4	2	2	1	1	2.5	8	2	888	8	7	2	2	2	2	888	2	5
562	4	2	2	3	1	7.5	4	2	888	31	40	2	2	2	1	2	2	1
563	4	2	2	3	2	888	5	2	888	14	7	2	2	2	1	2	2	1
564	4	2	2	1	1	2.5	5	1	1	19	0	1	1	2	1	2	2	5
565	4	2	2	2	1	2.5	7	2	888	13	15	2	2	2	2	888	2	1
566	4	2	2	3	2	888	9	2	888	14	5	2	2	2	2	888	2	1
567	4	2	2	2	1	2.5	6	2	888	17	6	2	2	2	1	2	2	1
568	4	2	2	2	1	2.5	7	2	888	14	0	2	2	2	2	888	2	1
569	4	2	2	2	2	888	5	1	1	15	44	2	2	2	1	1	2	1
570	4	2	2	3	1	7.5	1	2	888	26	24	2	2	2	2	888	2	4
571	4	2	2	2	2	888	9	2	888	10	22	2	2	2	1	2	2	1
572	4	2	2	2	1	2.5	8	2	888	10	53	2	2	2	2	888	2	1
573	2	2	2	2	1	2.5	5	2	888	12	28	2	2	2	1	2	2	5
574	4	2	2	2	1	2.5	7	2	888	12	46	2	2	2	2	888	2	5
575	4	2	2	1	1	2.5	5	2	888	13	17	2	2	2	1	2	2	4
576	4	2	2	3	1	7.5	4	1	1	24	9	2	2	2	2	888	2	2

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578	4	2	2	3	1	2.5	3	2	888	27	6	2	2	2	2	888	2	3
579	4	2	2	2	2	888	6	2	888	16	35	1	1	1	1	2	2	1
580	4	2	2	3	1	7.5	5	2	888	21	51	2	2	2	2	888	2	4
581	4	2	2	3	1	7.5	4	2	888	23	41	2	2	2	2	888	2	2
582	4	2	2	1	1	2.5	8	2	888	10	34	2	2	2	2	888	2	1
583	4	2	2	2	1	2.5	6	2	888	18	22	2	2	2	1	2	2	1
584	4	2	2	3	1	2.5	4	1	1	18	0	2	2	2	2	888	2	1
585	4	2	2	1	1	7.5	5	2	888	21	23	2	2	2	2	888	2	5
586	4	2	2	1	1	2.5	5	2	888	17	2	2	2	2	1	6	1	1
587	4	2	2	1	1	2.5	5	2	888	21	22	2	2	2	1	2	2	1
588	4	2	2	1	1	2.5	6	1	1	10	47	2	2	2	1	2	2	5
589	4	2	2	3	2	888	2	1	2	11	18	1	1	1	1	4	2	5
590	4	2	2	3	1	2.5	5	2	888	18	12	2	2	2	2	888	2	1
591	4	2	2	3	1	2.5	4	2	888	25	26	2	2	2	1	2	2	3
592	4	2	2	3	1	2.5	5	2	888	30	44	1	1	1	1	4	2	1
593	2	1	2	3	1	2.5	7	2	888	21	33	2	2	2	1	2	2	1
594	4	2	2	3	2	888	5	2	888	14	55	2	2	2	2	888	2	1
595	4	2	2	3	1	2.5	4	2	888	26	14	2	2	2	2	888	1	1
596	4	2	2	1	2	888	5	2	888	7	13	2	2	2	2	888	2	1
597	4	2	2	3	1	7.5	5	2	888	32	44	2	2	2	2	888	2	5
598																		
599	4	2	2	1	1	2.5	5	2	888	12	0	2	2	2	2	888	2	4
600	4	2	2	1	1	2.5	5	2	888	6	32	2	2	2	2	888	2	2
601																		
602	4	2	2	3	1	2.5	5	2	888	23	42	2	2	2	2	888	2	1
603	4	2	2	3	1	2.5	3	2	888	29	36	2	2	2	2	888	2	1
604	4	2	2	3	1	2.5	5	2	888	29	15	2	2	2	2	888	2	1
605	4	2	2	2	2	888	12	2	888	9	45	2	2	2	2	888	2	1
606	4	2	2	2	1	2.5	7	1	1	23	14	2	2	2	1	4	2	1
607	4	2	2	2	1	7.5	6	2	888	21	56	2	2	2	1	5	2	1
608	4	2	2	2	1	2.5	7	2	888	19	27	2	2	2	2	888	2	1
609	4	2	2	2	1	2.5	9	2	888	15	36	2	2	2	2	888	2	4
610	4	2	2	3	1	7.5	3	2	888	19	44	2	2	2	1	2	2	1
611	4	2	2	1	1	2.5	5	2	888	18	24	2	2	2	2	888	2	4
612	4	2	2	3	1	2.5	5	2	888	18	2	2	2	2	2	888	2	1

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614	4	2	2	3	2	888	5	2	888	20	58	2	2	2	1	2	2	1
615	4	2	2	3	1	2.5	5	2	888	16	56	2	2	2	2	888	2	1
616	4	2	2	3	1	7.5	3	2	888	23	40	2	2	2	2	888	2	5
617	4	2	2	1	1	2.5	5	2	888	9	35	2	2	2	2	888	2	3
618	4	2	2	1	2	888	13	2	888	6	52	2	2	2	2	888	2	4
619	4	2	2	1	2	888	11	2	888	8	5	2	2	2	2	888	2	4
620	4	2	2	1	2	888	13	2	888	7	43	2	2	2	2	888	2	5
621	4	2	2	1	2	888	6	2	888	10	27	1	1	1	1	2	2	1
622	4	2	2	3	1	2.5	6	1	1	25	55	1	1	1	1	7	2	1
623	4	2	2	3	1	7.5	5	2	888	25	52	2	2	2	1	5	2	5
624	4	2	2	3	1	7.5	4	2	888	22	48	2	2	2	2	888	2	5
625	4	2	2	1	1	2.5	6	2	888	12	51	2	2	2	1	2	2	5
626	4	2	2	2	2	888	13	2	888	11	54	2	2	2	2	888	2	1
627	4	2	2	2	2	888	12	2	888	24	0	2	2	2	2	888	2	1
628	4	2	2	2	1	2.5	5	2	888	16	38	2	2	2	2	888	2	5
629	4	2	2	3	1	7.5	5	2	888	29	9	2	2	2	2	888	2	1
630	4	2	2	2	2	888	5	2	888	17	24	2	2	2	1	2	2	2
631	4	2	2	1	2	888	5	2	888	17	50	2	2	2	2	888	2	2
632	4	2	2	3	1	2.5	4	2	888	19	13	2	2	2	1	2	2	1
633	4	2	2	3	1	2.5	5	2	888	24	34	2	2	2	1	2	2	5
634	4	2	2	2	1	2.5	5	2	888	17	16	2	2	2	2	888	2	1
635	4	2	2	3	1	2.5	4	2	888	21	23	2	2	2	2	888	2	3
636	4	2	2	3	1	15	2	1	1	33	56	2	2	2	2	888	2	1
637	4	2	2	2	1	2.5	6	1	1	21	48	1	1	1	1	2	2	5
638	4	2	2	3	1	2.5	5	2	888	18	0	2	2	2	2	888	2	3
639	4	2	2	2	1	7.5	6	2	888	30	0	2	2	2	2	888	2	1
640	4	2	2	3	1	7.5	5	1	1	26	23	2	2	2	2	888	2	4
641																		
642	4	2	2	3	1	2.5	3	2	888	25	9	2	2	2	2	888	2	1
643	4	2	2	3	1	2.5	6	2	888	21	48	2	2	2	2	888	2	1
644	4	2	2	3	1	2.5	5	2	888	21	14	2	2	2	2	888	2	4
645	4	2	2	2	1	2.5	7	2	888	28	30	2	2	2	1	2	2	1
646	4	2	2	2	1	2.5	5	2	888	18	25	2	2	2	1	5	2	4
647	4	2	2	1	1	2.5	5	2	888	16	37	2	2	2	1	2	2	4
648	4	2	2	3	1	7.5	6	2	888	27	37	2	2	2	2	888	2	1

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650	4	2	2	1	2	888	12	2	888	12	14	2	2	2	2	888	2	1
651	4	2	2	3	1	2.5	5	2	888	28	0	2	2	2	1	2	2	4
652	4	2	2	3	1	2.5	11	2	888	22	43	2	2	2	2	888	2	1
653	4	2	2	3	1	2.5	3	2	888	26	0	2	2	2	2	888	2	2
654	4	2	2	1	2	888	8	2	888	13	27	2	2	2	2	888	2	4
655	4	2	2	3	1	7.5	3	2	888	26	23	2	2	2	2	888	2	2
656	4	2	2	3	1	2.5	5	2	888	9	30	2	2	2	2	888	2	2
657	4	2	2	2	2	888	7	2	888	11	3	2	2	2	2	888	2	5
658	4	2	2	2	1	2.5	5	2	888	15	24	2	2	2	2	888	2	3
659	4	2	2	3	1	2.5	5	2	888	18	10	2	2	2	2	888	2	2
660	4	2	2	3	1	2.5	5	2	888	22	32	2	2	2	1	2	2	1
661																		
662	4	2	2	3	1	2.5	5	2	888	21	12	1	1	2	1	2	2	1
663	4	2	2	3	1	2.5	6	2	888	19	50	2	2	2	2	888	2	1
664	4	2	2	2	1	2.5	5	2	888	26	23	2	2	2	2	888	2	1
665	4	2	2	2	1	2.5	6	2	888	15	52	2	2	2	2	888	2	1
666	4	2	2	3	1	2.5	5	2	888	20	24	2	2	2	1	5	2	4
667	4	2	2	2	1	2.5	9	2	888	21	28	2	2	2	2	888	2	1
668	4	2	2	3	1	2.5	5	2	888	17	6	2	2	2	2	888	2	4
669	4	2	2	3	2	888	11	2	888	15	34	2	2	2	2	888	2	1
670	4	2	2	2	1	2.5	5	2	888	20	31	2	2	2	2	888	2	1
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772																		
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778	4	2	2	2	1	7.5	5	2	888	23	45	2	2	2	1	5	2	2
779	4	2	2	3	1	2.5	5	2	888	20	33	2	2	2	2	888	2	5

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## **ANNEXURES**

ANNEXURE I – INSTITUTIONAL REVIEW BOARD CLEARANCE

ANNEXURE II – ORIGINALITY CERTIFICATE

ANNEXURE III – PATIENT INFORMATION SHEET

ANNEXURE IV – PATIENT CONSENT FORM

ANNEXURE V – PROFORMA

ANNEXURE VI – MASTER SHEET

ANNEXURE VII – ABBREVIATION



**INSTITUTIONAL REVIEW BOARD (IRB)  
CHRISTIAN MEDICAL COLLEGE  
VELLORE 632 002, INDIA**

**Dr. B.J. Prashantham, M.A., M.A., Dr. Min(Clinical)**  
Director, Christian Counseling Centre  
Editor, Indian Journal of Psychological Counseling  
Chairperson, Ethics Committee, IRB

**Dr. Alfred Job Daniel, MS Ortho**  
Chairperson, Research Committee &  
Principal

**Dr. Gagandeep Kang, MD, Ph.D, FRCPath**  
Secretary, Research Committee, IRB  
Additional Vice Principal(Research)

January 31, 2012

Dr. Hilda Yenuber  
PG Registrar  
Department of Obstetrics & Gynaecology  
Christian Medical College  
Vellore 632 002

Sub: **FLUID Research grant project NEW PROPOSAL:**  
Oral versus Vaginal misoprostol for induction of labour  
Dr. Hilda Yenuberi, Obstetrics & Gynaecology  
Dr. Jiji E. Mathews, Dr. Reeta, Dr. Ajit Sebastian, Dr. Anuja, Obstetrics &  
Gynaecology.

Ref: IRB Min. No. 7598 dated 07.09.2011

Dear Dr. Yenuberi,

The Institutional Review Board (Blue, Research and Ethics Committee) of the Christian Medical College, Vellore, reviewed and discussed your project titled "Oral versus Vaginal misoprostol for induction of labour" on September 7, 2011.

The Committees reviewed the following documents:

1. Format for application to IRB submission
2. Patient Information Sheet and Informed Consent Form (English, Tamil and Hindi)
3. Cvs of Dr. Hilda Yenuberi, Jiji Elizabeth Mathews, Reeta Vijayselvi, Ajit Sebastian, Anuja Abraham
4. A CD containing documents 1 - 3

The following Institutional Review Board (Ethics Committee) members were present at the meeting held on September 7, 2011 in the CREST/SACN Conference Room, Christian Medical College, Bagayam, Vellore- 632002



**INSTITUTIONAL REVIEW BOARD (IRB)  
CHRISTIAN MEDICAL COLLEGE  
VELLORE 632 002, INDIA**

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Chairperson, Research Committee &  
Principal

**Dr. Gagandeep Kang, MD, Ph.D, FRCPath**  
Secretary, Research Committee, IRB  
Additional Vice Principal (Research)

Name	Qualification	Designation	Other Affiliations
Dr. B.J. Prashantham	MA (Counseling), MA (Theology), Dr Min (Clinical)	Chairperson (IRB) & Director, Christian Counseling Centre	Non-CMC
Mr. Harikrishnan	BL	Lawyer	Non-CMC
Mr. Samuel Abraham	MA, PGDBA, PGDPM, M.Phil, BL	Legal Advisor, CMC	
Dr. Jayaprakash Muliyl	BSC, MBBS, MD, MPH, DrPH (Epid), DMHC	Academic Officer, CMC	
Dr. Vathsala Sadan (on behalf of Mrs. Rosaline Jayakaran)	M.Sc. (Nursing), RN, RM	Dean, College of Nursing, CMC	
Dr. Gagandeep Kang	MD, Ph.D, FRCPath	Secretary IRB (EC) & Dy. Chairperson (IRB), Professor of Microbiology & Adtl. Vice Principal (Rese CMC)	

We approve the project to be conducted as presented.

The Institutional Ethics Committee expects to be informed about the progress of the project, any serious adverse events occurring in the course of the project, any changes in the protocol and the patient information/informed consent and requires a copy of the final report.

The investigators need to submit the study to the Data Safety Monitoring Committee.

A sum of ₹ 77,800/- (Rupees Seventy seven thousand eight hundred only) is sanctioned for 2 years.

Yours sincerely,

  
**Gagandeep Kang, MD, Ph.D, FRCPath**  
Secretary (Ethics Committee)  
Institutional Review Board

Secretary  
Institutional Review Board  
Ethics Committee  
Christian Medical College



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### Oral versus Vaginal misoprostol for labor induction

BY HILDA YENUBERI YENUBERI

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INTRODUCTION

Induction of labor is the non-spontaneous initiation of uterine contractions that result in progressive cervical effacement and dilatation with descent of the fetal presenting part. It is considered beneficial in many circumstances. Cervical status is an important clinical factor which determines the outcome of the induction process. More than 15% of all gravid women require aid in cervical ripening. The main problems during induction of labor are inability to achieve effective labor or the production of excessively strong uterine contractions.

Misoprostol a synthetic analogue of Prostaglandin E1 has been proposed as an alternative to Dinoprostone - agent of choice, for pre-induction cervical ripening. The recommended dose for vaginal route is 25 mcg every four hours. Excessive uterine

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INTRODUCTION Induction of labor is the non-spontaneous initiation of uterine contractions that result in progressive cervical effacement and dilatation with descent of the fetal presenting part. It is considered beneficial in many circumstances. Cervical status is an important clinical factor which determines the outcome of the induction process. More than 15% of all gravid women require aid in cervical ripening. The main problems during induction of labor are inability to achieve effective labor or the production of excessively strong uterine contractions. Misoprostol a synthetic analogue of Prostaglandin E1 has been proposed as an alternative to Dinoprostone- agent of choice, for...

## **Patient Information Sheet**

A decision to induce labour has been made by your doctor as it is now not safe to continue your pregnancy.

Induction of labour involves artificially preparing the uterine cervix with pharmaceutical or mechanical agents. The cervix will then respond to uterine contractions caused by oxytocin.

The agent currently used is a drug called misoprostol which is a prostaglandin. This is inserted in the vagina. However, even though the drug has been available in the market for more than 10 years, it is being used for induction of labour only for the last 5 years. Studies now say that misoprostol given orally is safer but the most effective dose is not known.

We are inviting you to participate in a study that will compare 25mcg of misoprostol given vaginally 4<sup>th</sup> hourly in 2 doses or 50mcg of misoprostol which is stepped up to 100mcg of misoprostol after 4 hours. A third dose of this may be given if you do not have uterine contraction.

Misoprostol like all prostaglandins is known to cause nausea and vomiting to the mother. It is known to cause increased uterine contractions in some women. Hence, with the onset of labour pains you will be transferred to labour room for continuous monitoring.

You will have no benefit or risk by participating in this study. However, if for some reason you do not choose to be part of this study, you will be at no disadvantage. You have the option of withdrawing from the study at any point without your medical care being affected.

**Informed Consent form to participate in a research study**

Study Title:

Study Number:

Subject's Initials: \_\_\_\_\_ Subject's Name: \_\_\_\_\_

Date of Birth / Age: \_\_\_\_\_

Please initial box

(Subject)

(i) I confirm that I have read and understood the information sheet dated \_\_\_\_\_ for the above study and have had the opportunity to ask questions. [  ]

(ii) I understand that my participation in the study is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected. [  ]

(iii) I understand that the Sponsor of the clinical trial, others working on the Sponsor's behalf, the Ethics Committee and the regulatory authorities will not need my permission to look at my health records both in respect of the current study and any further research that may be conducted in relation to it, even if I withdraw from the trial. I agree to this access. However, I understand that my identity will not be revealed in any information released to third parties or published. [  ]

(iv) I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s) [  ]

(v) I agree to take part in the above study. [  ]

Signature (or Thumb impression) of the Subject/Legally Acceptable Representative: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Signatory's Name: \_\_\_\_\_

Signature of the Investigator: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Study Investigator's Name: \_\_\_\_\_

Signature of the Witness: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Name of the Witness: \_\_\_\_\_

## Oral misoprostol Vs Vaginal misoprostol

1. Name \_\_\_\_\_ 2. Serial Number

3. Hospital Number

4. Age (in years)

5. Obstetric Score

6. Socio economic status      1. Low                      2. Middle                      3. High

7. Gestational age in weeks

8. Height in cms

9. Weight in kgs

10. Bishops score at induction

Bishop's Score	0	1	2	3
Length	3	2	1	0
Dilatation	0	1-2	3-4	5
Consistency	F	M	S	
Position	P	M	A	
Station	-3	-2	-1 0	+1 0

11. Timing of ARM i.e. no of hours after initiating IOL

12. Vaginal delivery occurred in 24 hours

1. Yes                                      2. No                                      3. NA

13. Vaginal delivery occurred in 12 hours

1. Yes                                      2. No                                      3. NA

14. Mode of delivelry

1. Vaginal                                      2. Instrumental                                      3. LSCS

15. Induction for LSCS

1. Trace abnormality                      2. Trace abnormality due to hyperstimulation  
3. Failure to progress                      4. CPD  
5. Malpresentation                      6. Others (Specify) \_\_\_\_\_  
7. Not applicable



- |   |                                      |                 |                          |
|---|--------------------------------------|-----------------|--------------------------|
|   | 1. Yes                               | 2. No           |                          |
| 31a. Terbutaline                          | 1. Yes                               | 2. No           |                          |
| 32. Trace abnormality                     | 1. Yes                               | 2. No           |                          |
| 33. Type of trace abnormality             | 1. Early                             | 2. Variable     | 3. Late                  |
|   | 4. Bradycardia (prolonged)           |                 | 5. Tachcardia            |
|   | 6. Tachycardia with poor variability |                 | 7. Others (Specify)_____ |
| 33a. Chorioamnionitis                     | 1. Yes                               | 2. No           |                          |
| 34. Patient satisfaction (Score 1 - 5)    |                                      |                 |                          |
| 35. Care giver satisfaction (Score 1 - 5) |                                      |                 |                          |
| 36. Indication for induction              | 1. Past dates                        | 2. Hypertension | 3. IUGR                  |
|   | 4. Gestational diabetes              |                 | 5. Others                |



## **ABBREVIATIONS**

HOSP. NO – Hospital number

GRA – Gravida

PA – Para

LI – Living

END – Early neonatal death

AB – Abortion

MSB – Macerated still birth

FSB – Fresh still birth

DE- Death

ECT –Ectopic pregnancy

MO – Molar pregnancy

SES – Socio-economic status

GA – Gestational age

HT – Height

WT – Weight

BSI – Bishop's score at induction

BSA – Bishop’s score at ARM

VD – Vaginal delivery

MO – Mode of delivery

IND – Indication for LSCS

SMO – Serious maternal outcome

SMR – Reason for serious maternal outcome

MAT – Maternal side effects

BW – Birth weight in grams

AP – APGAR <7 at 5 mins

PH – Cord Ph

NEOE – Neonatal encephalopathy

NEOS – Neonatal sepsis

DO – Number of doses of Misoprostol

OXY – Oxytocin

UNITS – Units of oxytocin used

MSAF – Meconium stained amniotic fluid

COL – Thick/Thin MSAF

IDI – Induction to delivery interval

HYP – Uterine hyperstimulation

TRUH – Trace abnormality with uterine hyperstimulation

TERB – Terbutaline used

TRA – Trace abnormality

TYPE – Type of trace abnormality

CHO – Chorioamnionitis

IFI – Indication for induction