Automatic Formative Assessment Strategies for the Adaptive Teaching of Mathematics

The 1 euro coin and the Turkish 50 cents lira coin have the same dimensions, colors and measures. Mario has 3 one-euro coins and 2 Turkish fifty-cent lira coins in his pocket.

Without looking, he takes a coin out of his pocket and then another.

What is the probability that the first coin is fifty cents of a lira and the second coin is one euro?

- ◯ 15%
- ◯ 20%
- ◯ 25%
- ◯ 30%

Fig. 9.

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‡ .

Justifying dimension. I O R R U ¶ V

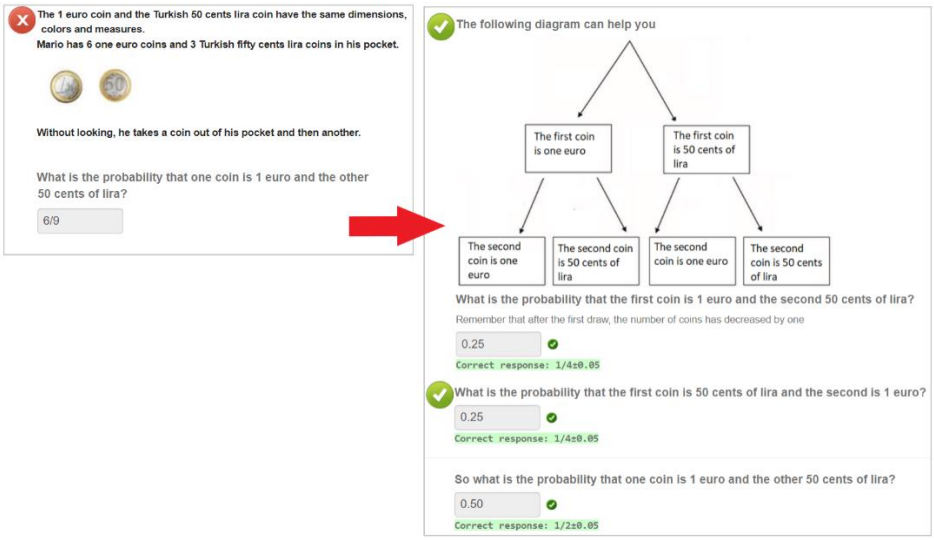

Fig. 10. ‡ .

5.3 Observations on students answers to questions created by teachers

Solving problems dimension. ¶

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M D U ¶ V

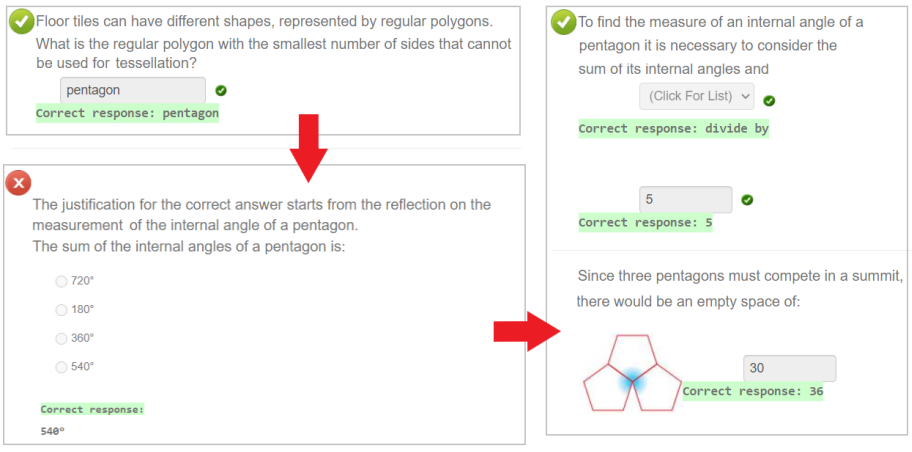

Fig. 11. ‡ · G L P H Q V L R Q

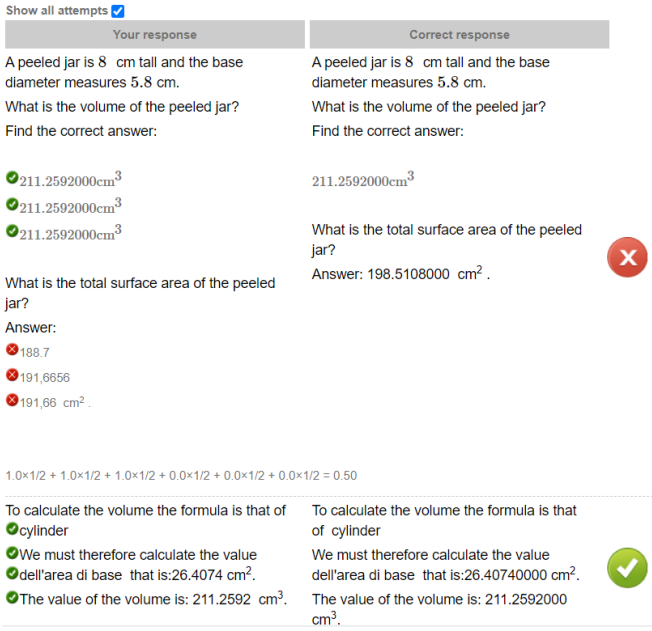
Show all attempts
Your response
Correct response
A peeled jar is 8 cm tall and the base diameter measures 5.8 cm.
What is the volume of the peeled jar?
Find the correct answer:
211.2592000cm3
211.2592000cm3
211.2592000cm3
What is the total surface area of the peeled jar?
Answer:
188.7
191,6656
191,66 cm2 .
A peeled jar is 8 cm tall and the base diameter measures 5.8 cm.
What is the volume of the peeled jar?
Find the correct answer:
211.2592000cm3
What is the total surface area of the peeled jar?
Answer: 198.5108000 cm2 .
1.0×1/2 + 1.0×1/2 + 1.0×1/2 + 0.0×1/2 + 0.0×1/2 + 0.0×1/2 = 0.50
To calculate the volume the formula is that of
cylinder
We must therefore calculate the value
dell'area di base that is:26.4074 cm2.
The value of the volume is: 211.2592 cm3.
To calculate the volume the formula is that of cylinder
We must therefore calculate the value dell'area di base that is:26.40740000 cm2.
The value of the volume is: 211.2592000 cm3.

Fig. 12. ¶

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Justifying dimension. ¶ ‡ ·

I O R R U ¶ V

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‡ · ‡ · ‡ · ‡ ·

‡ ·
‡ ·
D SRO\JRQ¶V

‡ ·

WKH SHQWDJRQ¶V LQWHUQDO DQJOH PXOWLSO\ LW E\ W

5.4 Observations on the experimentation with students

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‡ · ‡ ·

Table 2.

	0HDQ RI WHDFK

W K H V W X G H Q W V ¶ D Q V Z H U V ¶ V R Q H V

‡ ‡ · ‡ ·

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5.5 Teachers' observations on the training module

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Table 3.

0HDQ RI WHDFK

‡ . ‡ .

Table 4.

0HDQ RI WHDFK

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Table 5.

0HDQ RI WHDFK

x

x

x

x

x ¶

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6 Conclusions

LFDWLRQ¶V REMHFWLYH

GHQWV¶ GLIILFXOWLHV DQG QHHG

VWXGHQWV¶ DFWLYLWLHVVWXGHQWV¶ EHKDYLRU

WKHP WR WKH VWXGHQWV¶ QHHGV DQG WR LPSURYH WKHLU X

HDFKHUV¶ WUDLQLQJ

DFWLYLWLHV 7KH UHVHDUFKHUV¶ SUHVHQFH LQ

WKH VWXGHQWV¶

References

,&7V WR 5HGXFH WKH 6FKRRO)DLOXUH LQ WKH 3URMHFW ‡6FXROD

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LFRO ’ - 0DFIDUODQH('LFN ’)RUPDWLYH DVVHVVPHQW DQG VH