

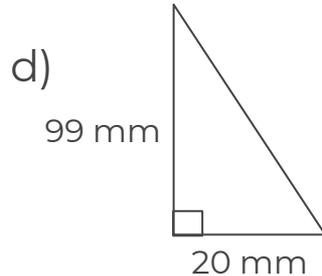
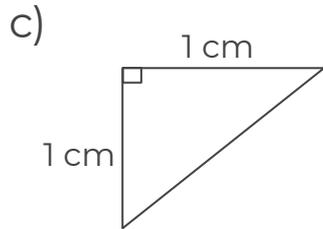
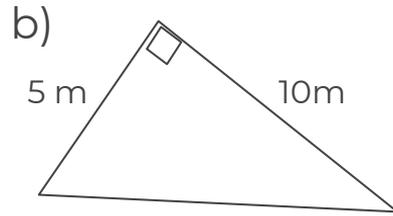
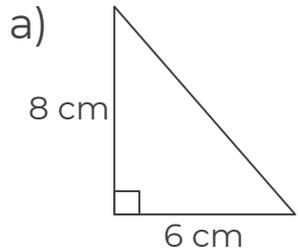
Find the Length of the Hypotenuse



Find the Length of the Hypotenuse

1. Find the missing length of each right-angled triangle.

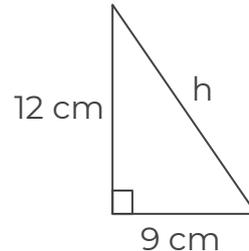
Round your answer to 3 significant figures where necessary.



2. Dani walks 2.5 km east and 5.4 km north.

If he had taken a direct route, how far would he have walked?

3. Teddy is working out the length of the hypotenuse.



$$\begin{aligned}9^2 + 12^2 &= h^2 \\18 + 24 &= h^2 \\42 &= h^2 \\h &= 6.48 \text{ cm}\end{aligned}$$

He is wrong.

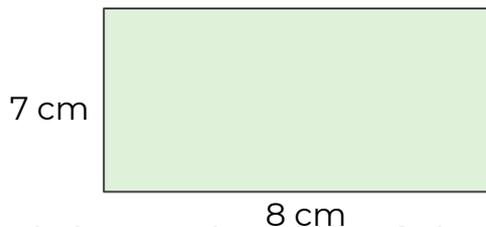
What mistake has he made?



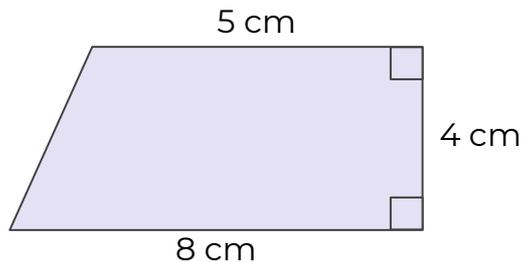
Find the Length of the Hypotenuse

4. Sofia says you cannot draw a 10 cm line inside this rectangle.

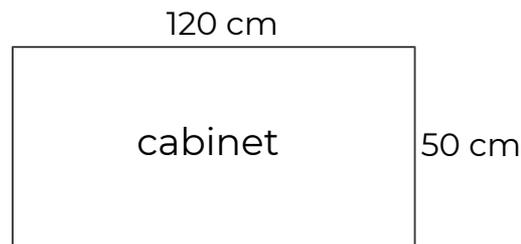
Is she correct?



5. Find the perimeter of the trapezium.



6. Ollie wants to buy a new TV but it has to fit in his TV cabinet. He measures the space inside the cabinet.



TV's are available in 35", 45", 55" or 65".
1 inch = 2.5 cm, what is the maximum TV screen size Ollie can fit in the cabinet?



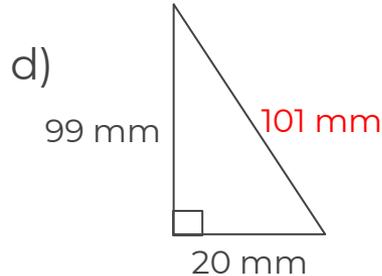
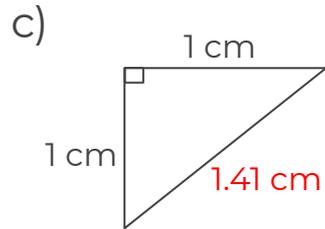
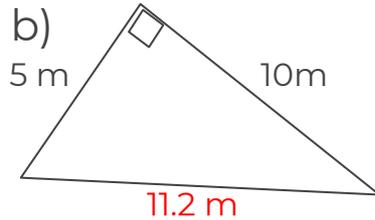
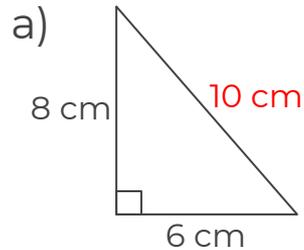
Answers



Find the Length of the Hypotenuse

1. Find the missing length of each right-angled triangle.

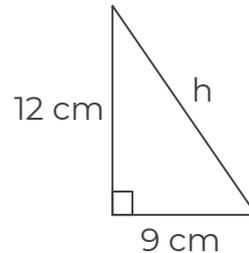
Round your answer to 3 significant figures where necessary.



2. Dani walks 2.5 km east and 5.4 km north.

If he had taken a direct route, how far would he have walked? **5.95 km**

3. Teddy is working out the length of the hypotenuse.



$$\begin{aligned}9^2 + 12^2 &= h^2 \\18 + 24 &= h^2 \\42 &= h^2 \\h &= 6.48 \text{ cm}\end{aligned}$$

He is wrong. **$9^2 = 81$, $12^2 = 144$**

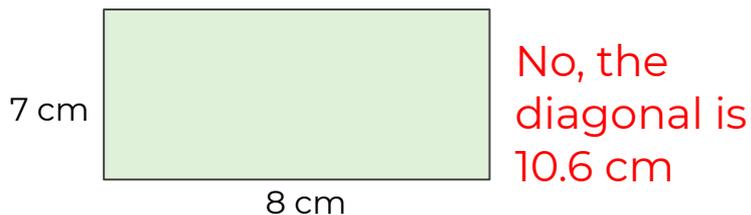
What mistake has he made?



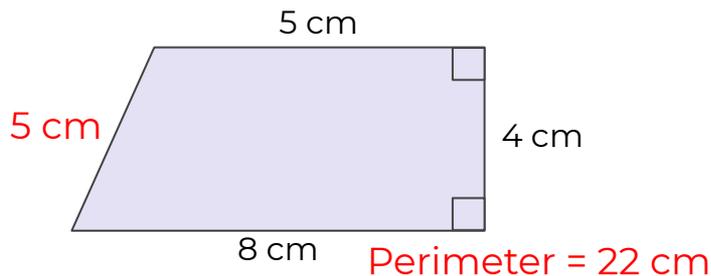
Find the Length of the Hypotenuse

4. Sofia says you cannot draw a 10 cm line inside this rectangle.

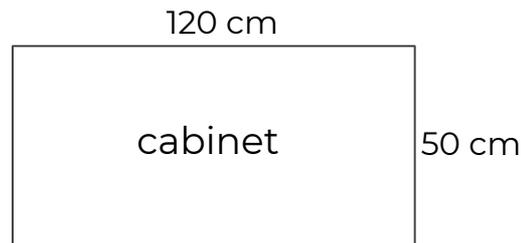
Is she correct?



5. Find the perimeter of the trapezium.



6. Ollie wants to buy a new TV but it has to fit in his TV cabinet. He measures the space inside the cabinet.



TV's are available in 35", 45", 55" or 65".
1 inch = 2.5 cm, what is the maximum TV screen size Ollie can fit in the cabinet? 45"

