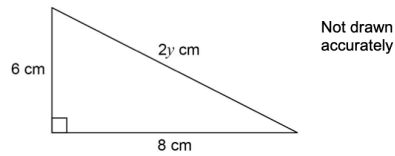


Q1. (2017)

- 15 Sami is trying to work out the exact value of y using Pythagoras' theorem.



Here is her working.

$$(2y)^2 = 6^2 + 8^2$$

$$2y^2 = 36 + 64$$

$$2y^2 = 100$$

$$y^2 = 100 \div 2$$

$$y^2 = 50$$

$$y = \sqrt{50}$$

A)

- 15 (a) What error has she made in her working?

[1 mark]

B)

- 15 (b) Kai works out that $y = 5$

Mel says,

" y cannot be 5 because the hypotenuse should be the longest side and the other sides are longer than 5 cm"

Is Mel correct?

Tick a box.

Yes

☐

No

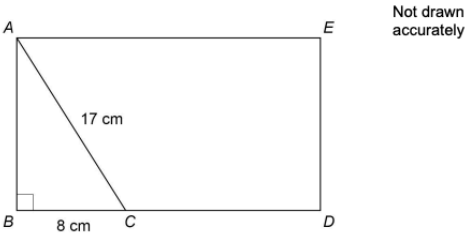
☐

Give a reason for your answer.

[1 mark]

Q2. (2019)

- 7
- The diagram shows rectangle $ABDE$ and right-angled triangle ABC .
 $AC = 17\text{ cm}$
 $BC = 8\text{ cm}$



$BC : CD = 1 : 2$

Work out the area of rectangle $ABDE$.

[4 marks]

Answer _____ cm^2

Q3. (2024)

- 18
- A diagonal of a rectangle is 23.7 cm long.
The diagonal makes an angle of 52° with a side of length $x\text{ cm}$
Work out the value of x .
- [3 marks]

$x =$ _____