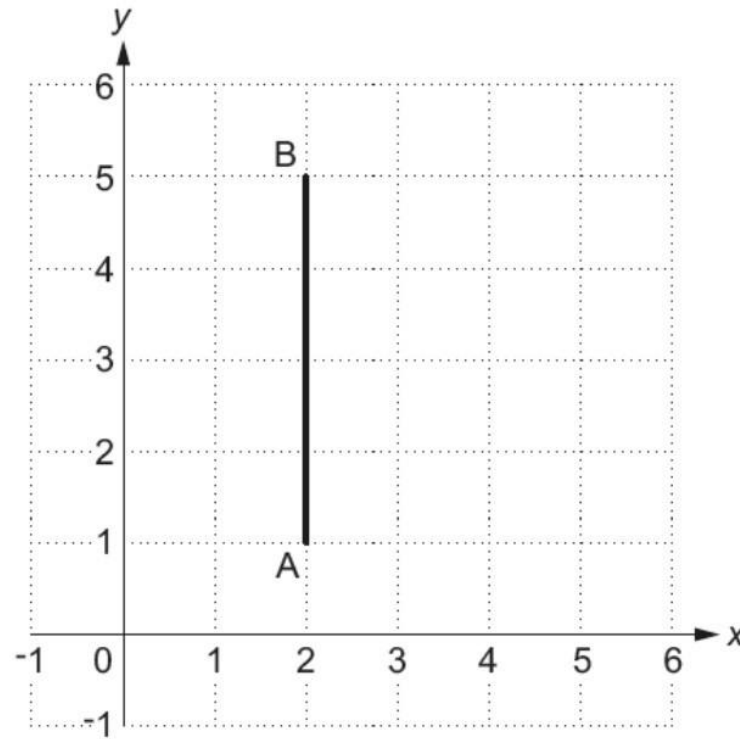

G15...Perimeter

OCR

(b) On this grid, AB is one side of a rectangle ABPQ with perimeter 12 cm.

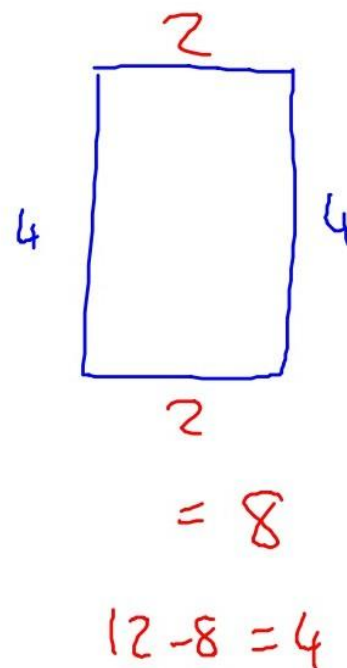
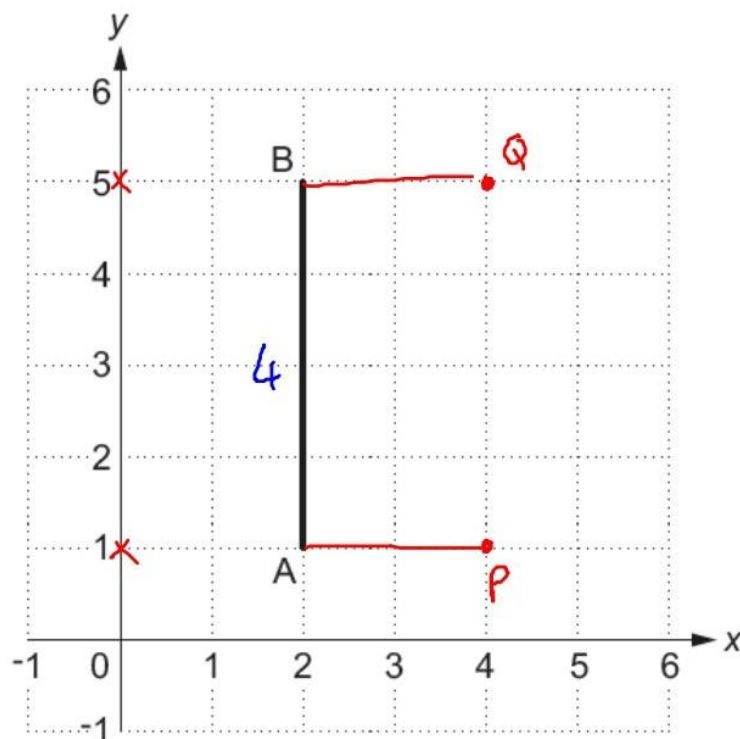


Find the coordinates for the positions of P and Q.
Two different answers are possible.

(b) First answer: P (.....,) and Q (.....,)

Second answer: P (.....,) and Q (.....,) [3]

(b) On this grid, AB is one side of a rectangle ABPQ with perimeter 12 cm.

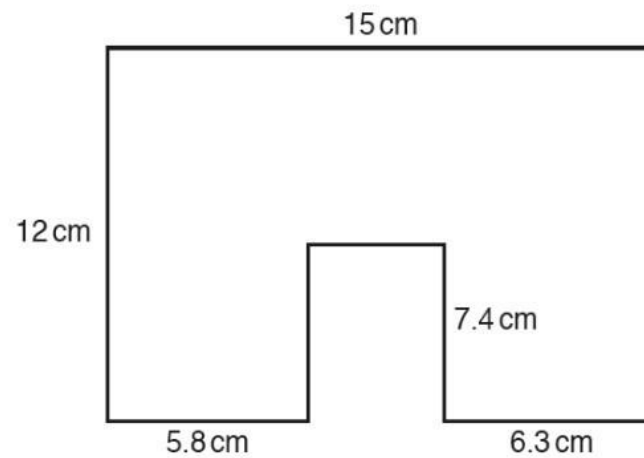


Find the coordinates for the positions of P and Q.
Two different answers are possible.

- (b) First answer: P (.....⁴.....,¹.....) and Q (.....⁴.....,⁵.....)
Second answer: P (.....⁰.....,¹.....) and Q (.....⁰.....,⁵.....) [3]

- 12 The shape below is formed from a rectangle measuring 12 cm by 15 cm from which a rectangle of length 7.4 cm has been removed.

Not to scale

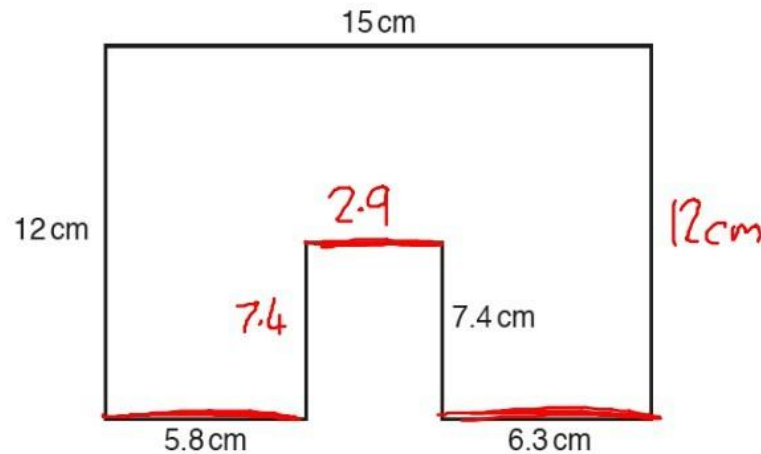


Work out the perimeter of the shape.

.....cm [3]

- 12 The shape below is formed from a rectangle measuring 12 cm by 15 cm from which a rectangle of length 7.4 cm has been removed.

Not to scale



$$\begin{aligned} &15 + 12 + 12 + 5.8 \\ &+ 7.4 + 2.9 + 7.4 \\ &+ 6.3 \checkmark \end{aligned}$$

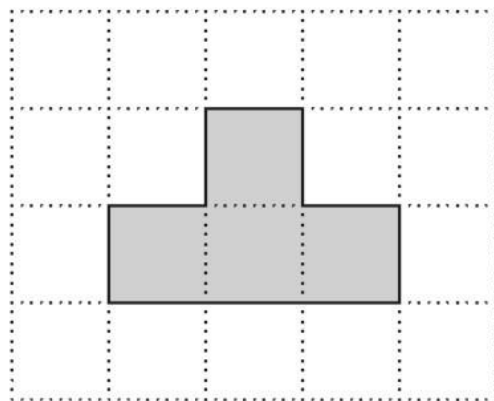
Work out the perimeter of the shape.

↪ distance outside

68.8

.....cm [3]

- 5 A shape is drawn on a one-centimetre grid.



- (a) Find the perimeter of the shape.

G15

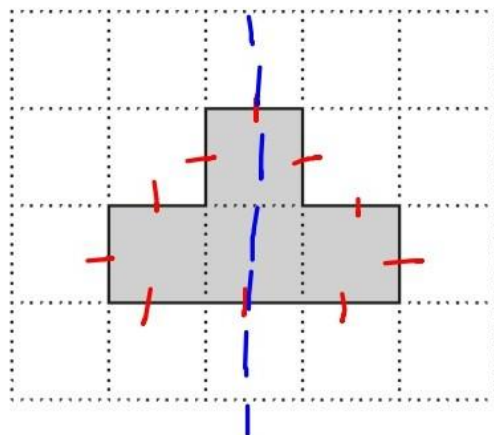
(a) cm [1]

- (b) How many lines of symmetry does the shape have?

G1

(b) [1]

- 5 A shape is drawn on a one-centimetre grid.



- (a) Find the perimeter of the shape.

G15

(a) 10 cm [1]

- (b) How many lines of symmetry does the shape have?

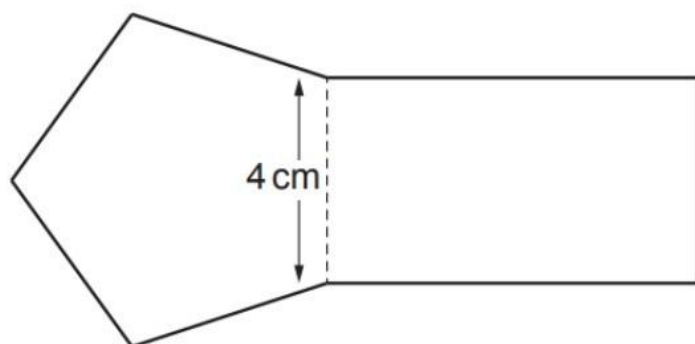
G1

(b) 1 [1]

- 12** The shape below is formed by a rectangle of width 4 cm and a regular pentagon.
For the rectangle, the ratio of the width to the length is 2 : 5.

R13

G15



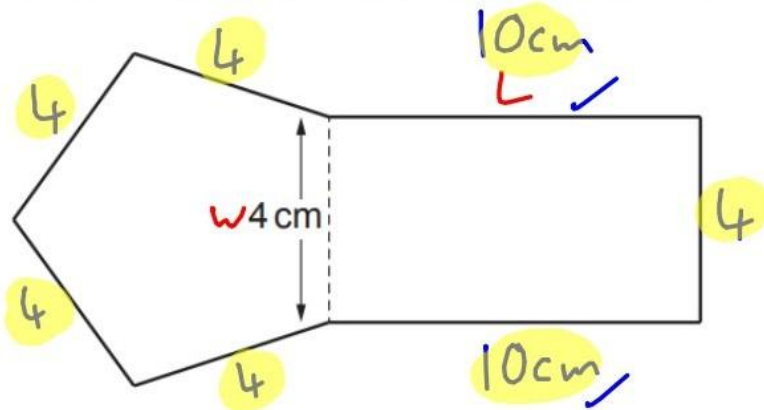
Not to scale

Work out the perimeter of the shape.

..... cm **[4]**

- 12 The shape below is formed by a rectangle of width 4 cm and a regular pentagon. For the rectangle, the ratio of the width to the length is 2 : 5.

R13
G15



Not to scale

Work out the perimeter of the shape.

$$W : L$$

$$2 : 5$$

$$4 \text{ cm} : 10 \text{ cm}$$

$$[2] [2] : [2] [2] [2] [2] [2]$$

10 cm

$$20 \text{ cm} + 20 \text{ cm}$$

10 + 10

4 x 5

40

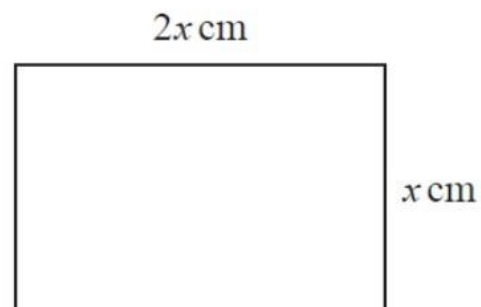
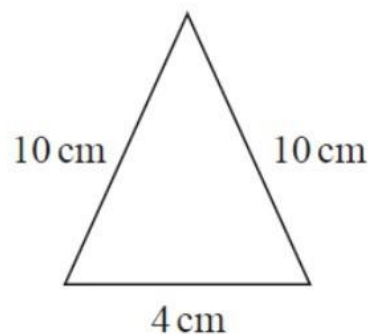
..... cm [4]

Edexcel

10 Here is a triangle and a rectangle.

A16

G15



The perimeter of the triangle is the same as the perimeter of the rectangle.

Work out the width and length of the rectangle.

width = cm

length = cm

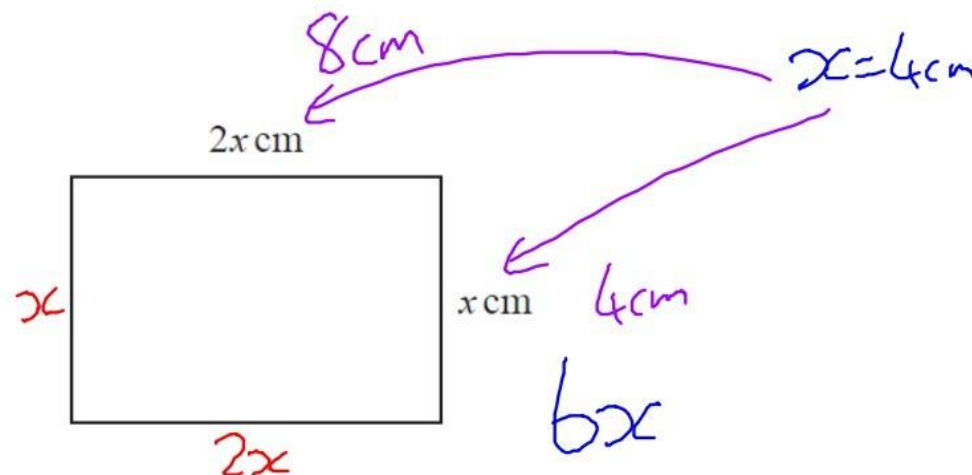
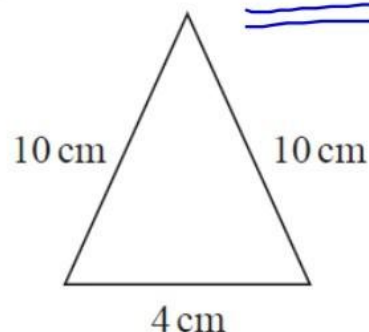
(Total for Question 10 is 4 marks)

10 Here is a triangle and a rectangle.

A16

G15

$$10 + 10 + 4 = \underline{\underline{24\text{ cm}}}$$



The perimeter of the triangle is the same as the perimeter of the rectangle.

Work out the width and length of the rectangle.

$$6x = 24\text{ cm}$$

$$x = \frac{24}{6}$$

$$x = 4\text{ cm}$$

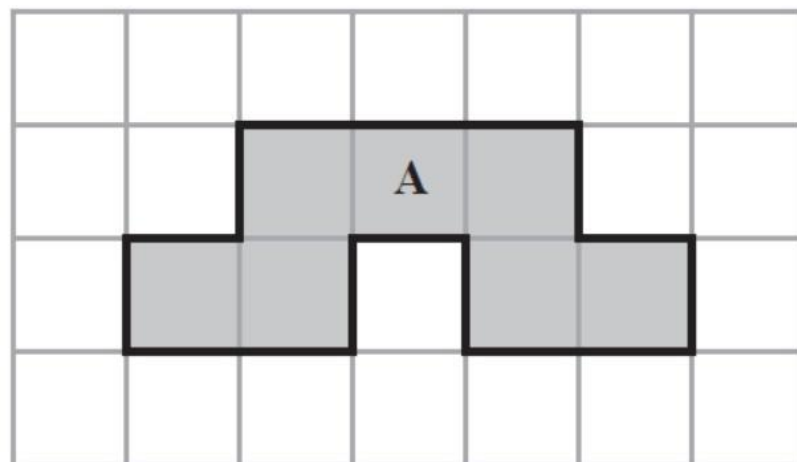
width = 4 cm

length = 8 cm

(Total for Question 10 is 4 marks)

8 Shape A is shown shaded on a grid of centimetre squares.

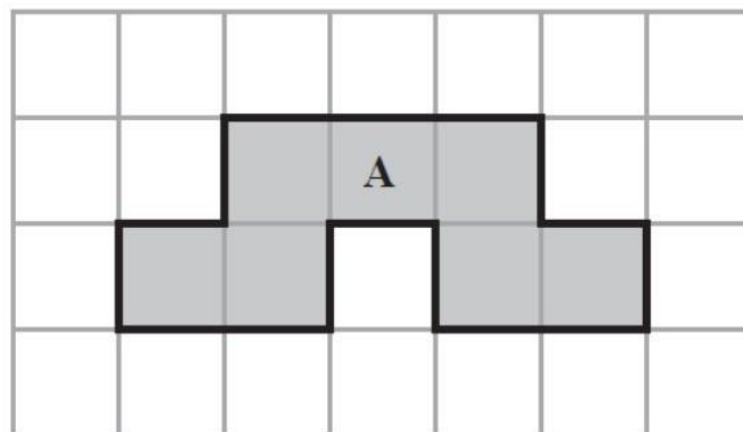
G15



(a) Find the perimeter of shape A.

Shape A is shown shaded on a grid of centimetre squares below.

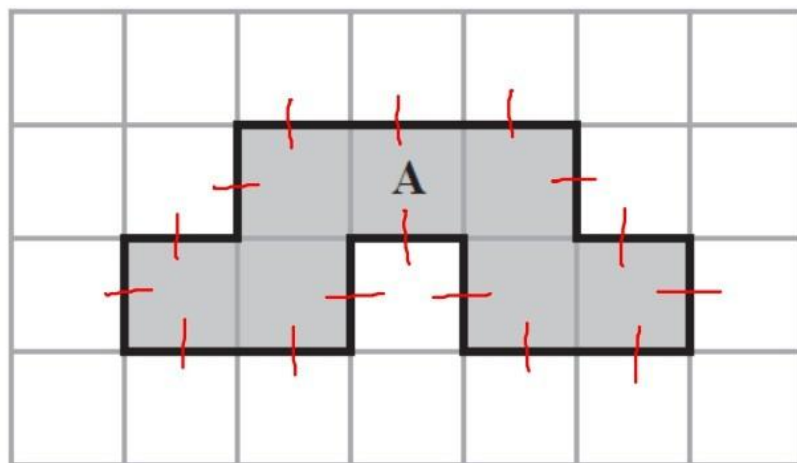
- (b) On the grid, shade **one** more square so that the shaded shape now has a perimeter which is **less** than the perimeter of shape A.



(1)

8 Shape A is shown shaded on a grid of centimetre squares.

G15



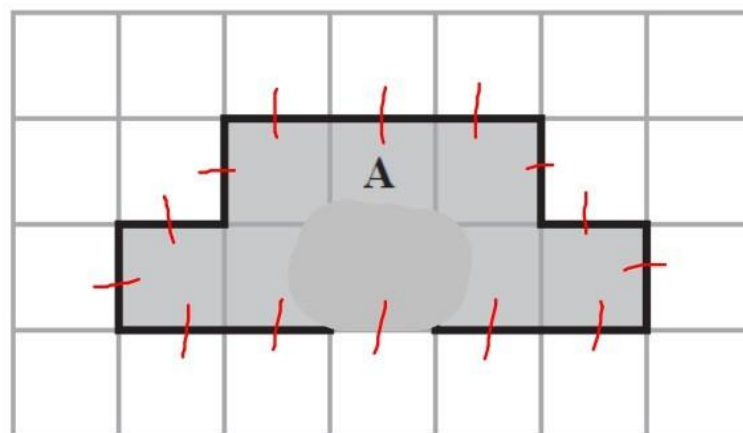
(a) Find the perimeter of shape A.

16cm

(2)

Shape A is shown shaded on a grid of centimetre squares below.

- (b) On the grid, shade **one** more square so that the shaded shape now has a perimeter which is **less** than the perimeter of shape A.

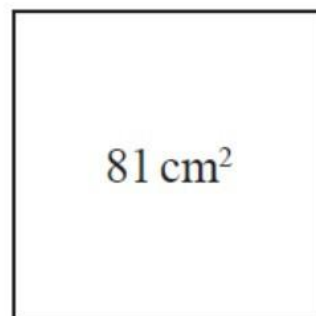


now perimeter
is 14cm

(1)

$$14\text{cm} < 16\text{cm}$$

13 A square has an area of 81 cm^2



(a) Find the perimeter of the square.

G15

G17

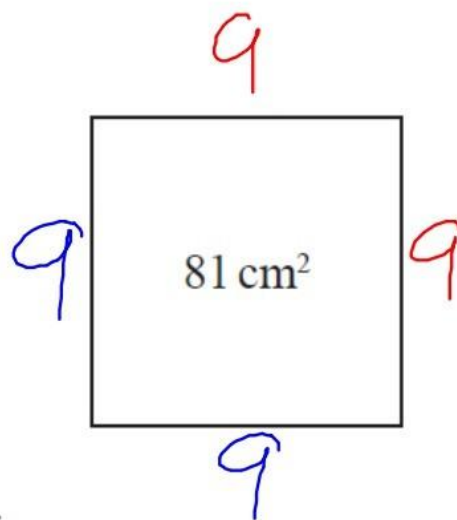
.....cm

(2)

13 A square has an area of 81 cm^2

$$\text{Area} \quad _ \times _ = 81$$

$$\sqrt{81} = 9$$



$$9 \times 9 = 81$$

(a) Find the perimeter of the square.

G15

G17

$$\rightarrow 9 + 9 + 9 + 9$$

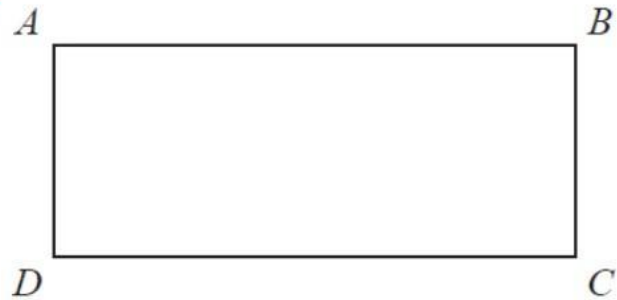
$$\text{or } 9 \times 4 = 36$$

36 cm
(2)

28 Here are two rectangles.

G15

G17



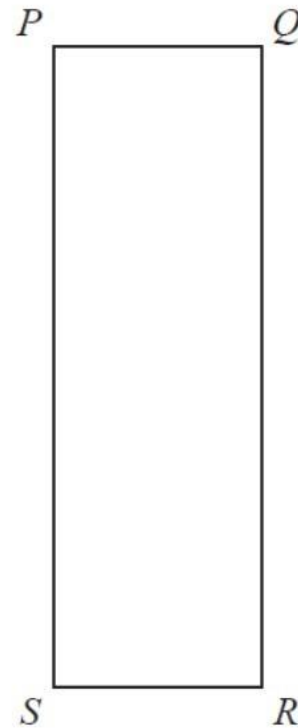
$$QR = 10 \text{ cm}$$

$$BC = PQ$$

The perimeter of $ABCD$ is 26 cm

The area of $PQRS$ is 45 cm^2

Find the length of AB .



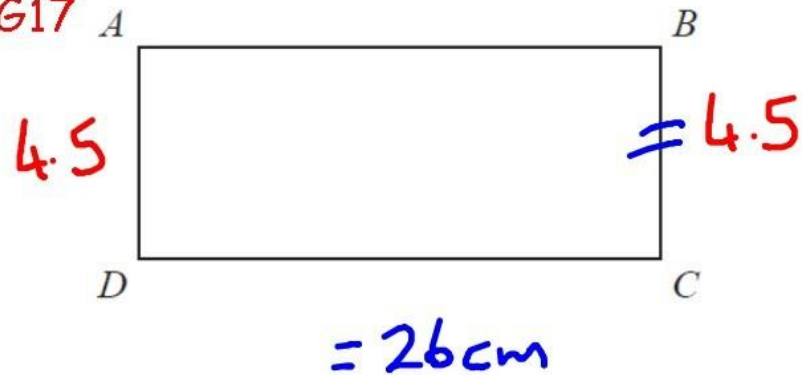
..... cm

(Total for Question 28 is 4 marks)

28 Here are two rectangles.

G15

G17



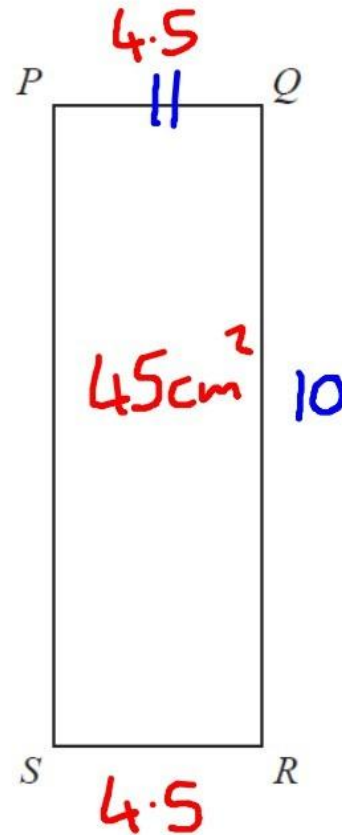
$QR = 10\text{ cm}$

$BC = PQ$

The perimeter of $ABCD$ is 26 cm

The area of $PQRS$ is 45 cm^2

Find the length of AB .



$$\frac{17\text{cm}}{2}$$

$$26 - 4.5 - 4.5$$

9

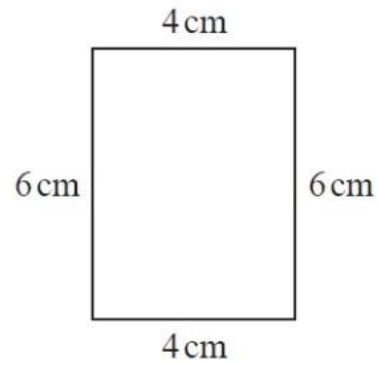
$$= 17\text{cm}$$

$$\frac{17\text{cm}}{2} = 8.5\text{ cm}$$

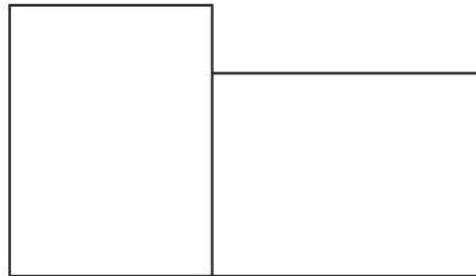
(Total for Question 28 is 4 marks)

16 Here is a rectangle.

615



The 6-sided shape below is made from two of these rectangles.



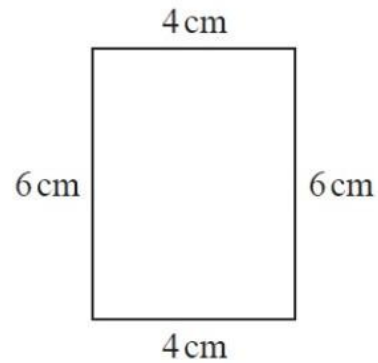
Work out the perimeter of this 6-sided shape.

..... cm

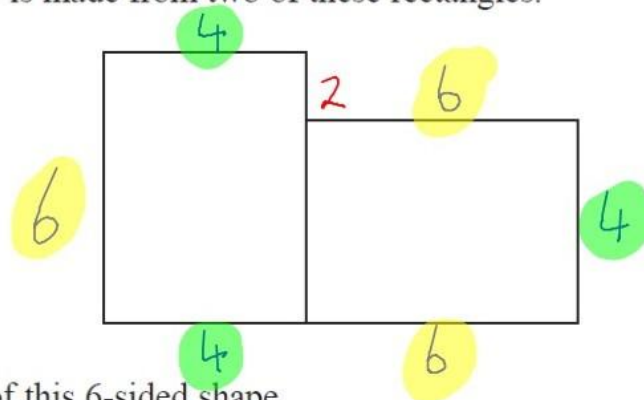
(Total for Question 16 is 3 marks)

16 Here is a rectangle.

615



The 6-sided shape below is made from two of these rectangles.



$$\begin{array}{r} 12 \\ 18 \\ + 2 \\ \hline \end{array}$$

Work out the perimeter of this 6-sided shape.

32 cm

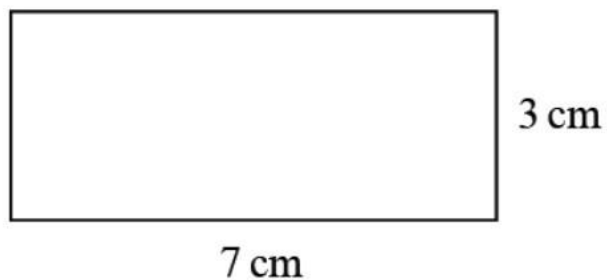
(Total for Question 16 is 3 marks)



14 Here is a rectangle.

G15

G17



Coby has to find the perimeter of this rectangle.

He writes,

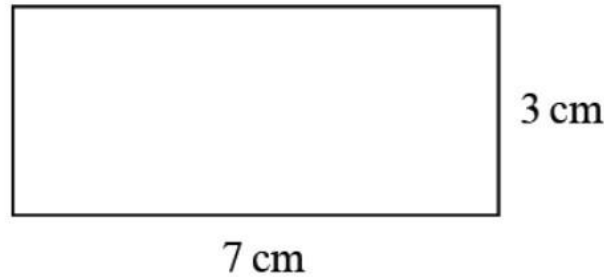
$$\text{Perimeter} = 7 \times 3$$

(a) What mistake has Coby made?

14 Here is a rectangle.

G15

G17



Coby has to find the perimeter of this rectangle.

He writes,

$$\text{Perimeter} = 7 \times 3$$

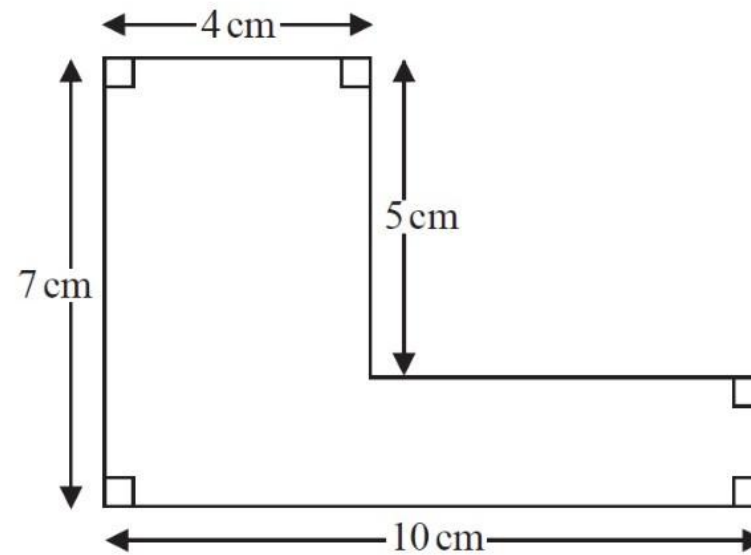
(a) What mistake has Coby made?

Coby has found area

He needs to add all sides to get perimeter

13

G15



Work out the perimeter of this shape.

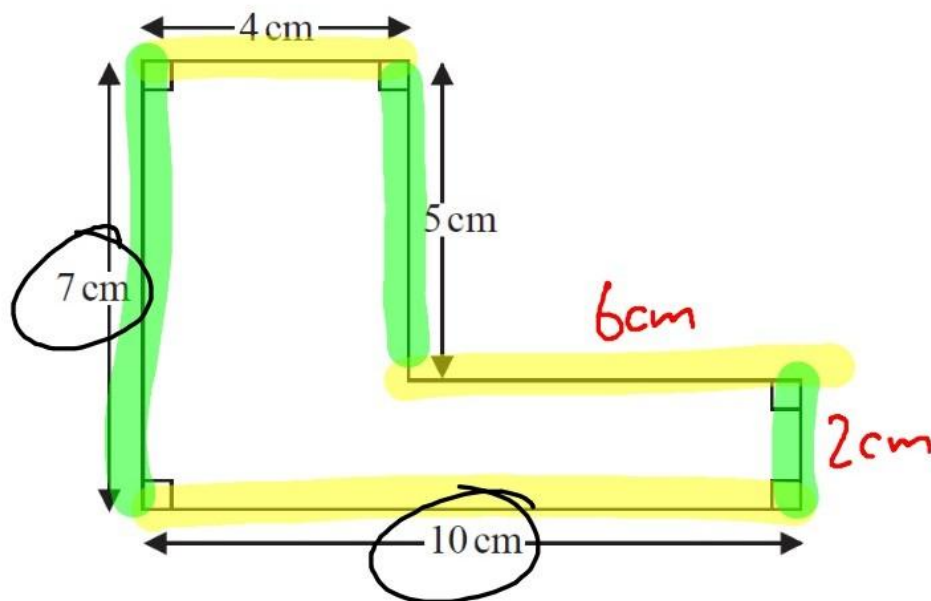
..... cm

(Total for Question 13 is 2 marks)

13

G15

$$\begin{array}{r} 17\text{cm} \\ + 17 \\ \hline 34\text{cm} \end{array}$$



Work out the perimeter of this shape.

all way around

34

..... cm

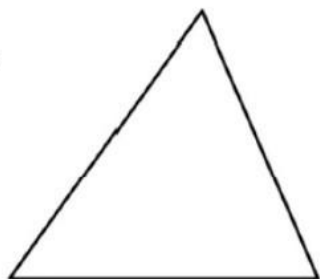
(Total for Question 13 is 2 marks)

AQA

11

A triangle has perimeter 32 cm

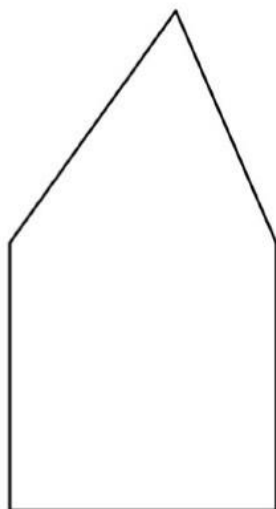
G15



A square has perimeter 40 cm



Two sides of the shapes are put together to make a pentagon.



Not drawn
accurately

Work out the perimeter of the pentagon.

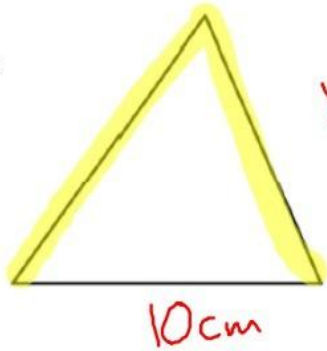
[4 marks]

Answer _____ cm

11

A triangle has perimeter 32 cm

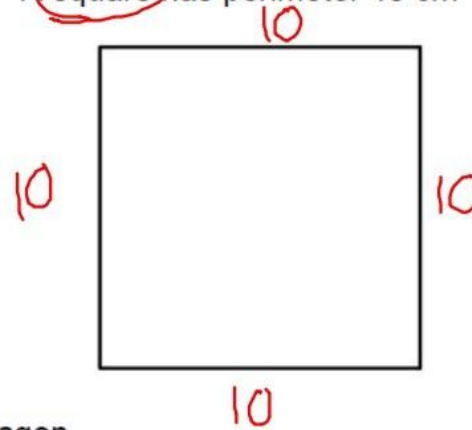
G15



Yellow = 22cm

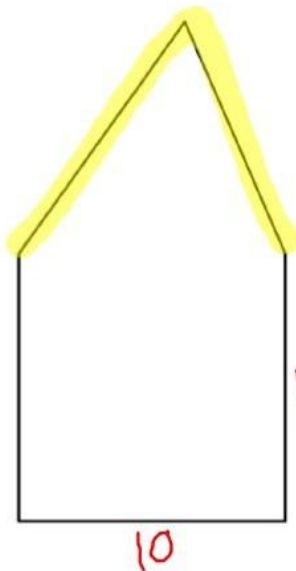
$$22 + 10 = 32$$

A square has perimeter 40 cm



$$40 \div 4 = 10 \text{ cm}$$

Two sides of the shapes are put together to make a pentagon.



Not drawn accurately

— = 22cm

Work out the perimeter of the pentagon.

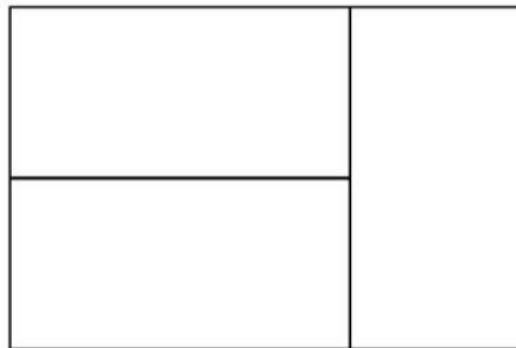
$$22 + 10 + 10 + 10$$

[4 marks]

Answer 52 ✓ cm

- 31 A large rectangle is made by joining three identical small rectangles as shown.

G15



Not drawn
accurately

The perimeter of one small rectangle is 15 cm

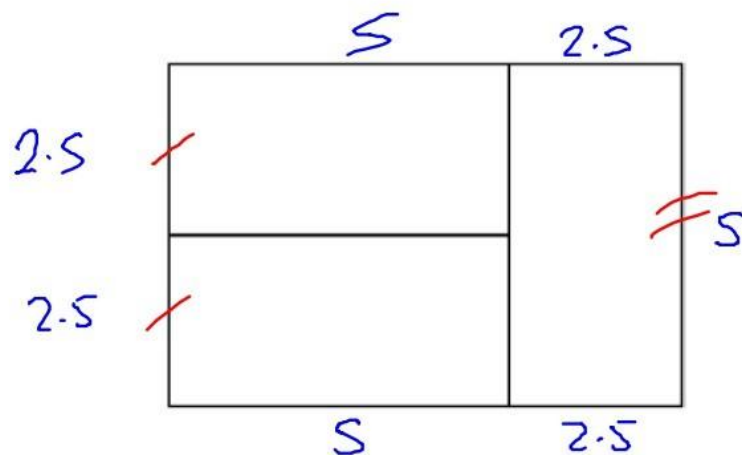
Work out the perimeter of the large rectangle.

[4 marks]

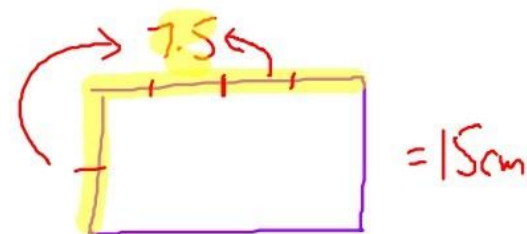
Answer _____ cm

- 31 A large rectangle is made by joining three identical small rectangles as shown.

G15



Not drawn accurately



$$7.5 \div 3 = 2.5$$

The perimeter of one small rectangle is 15 cm

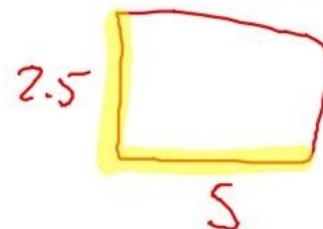
Work out the perimeter of the large rectangle.

$$2.5 \times 4 = 10$$

$$+(3 \times 5) = 15$$

$$10 + 15$$

[4 marks]



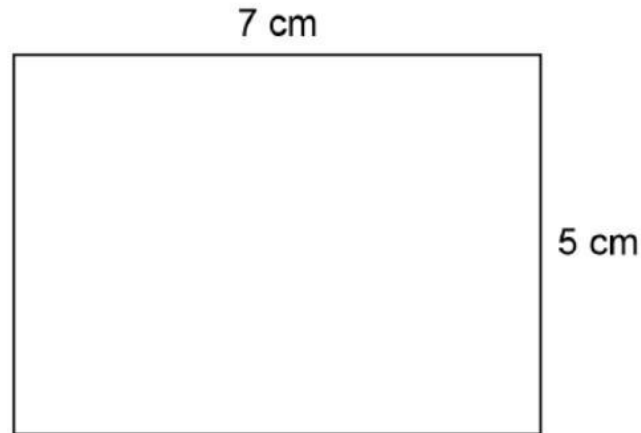
Answer 25 ✓ cm

1

G15

Here is a rectangle.

Not drawn
accurately



Work out the perimeter.

Circle your answer.

[1 mark]

12 cm

24 cm

35 cm

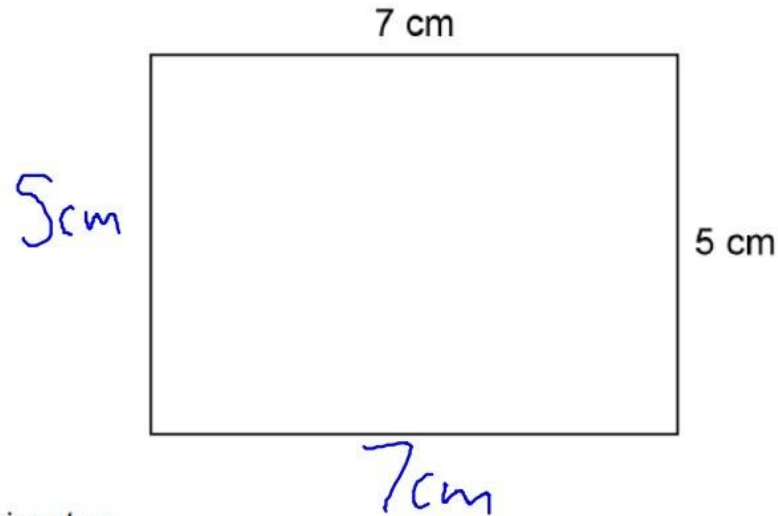
70 cm

1

615

Here is a rectangle.

Not drawn
accurately



Work out the perimeter.

Circle your answer.

[1 mark]

12 cm

24 cm

35 cm

70 cm

10 Each side of a square is made 3 times as long.

G15

What happens to the perimeter?

Circle your answer.

[1 mark]

$\times 3$

$\times 6$

$\times 9$

$\times 12$

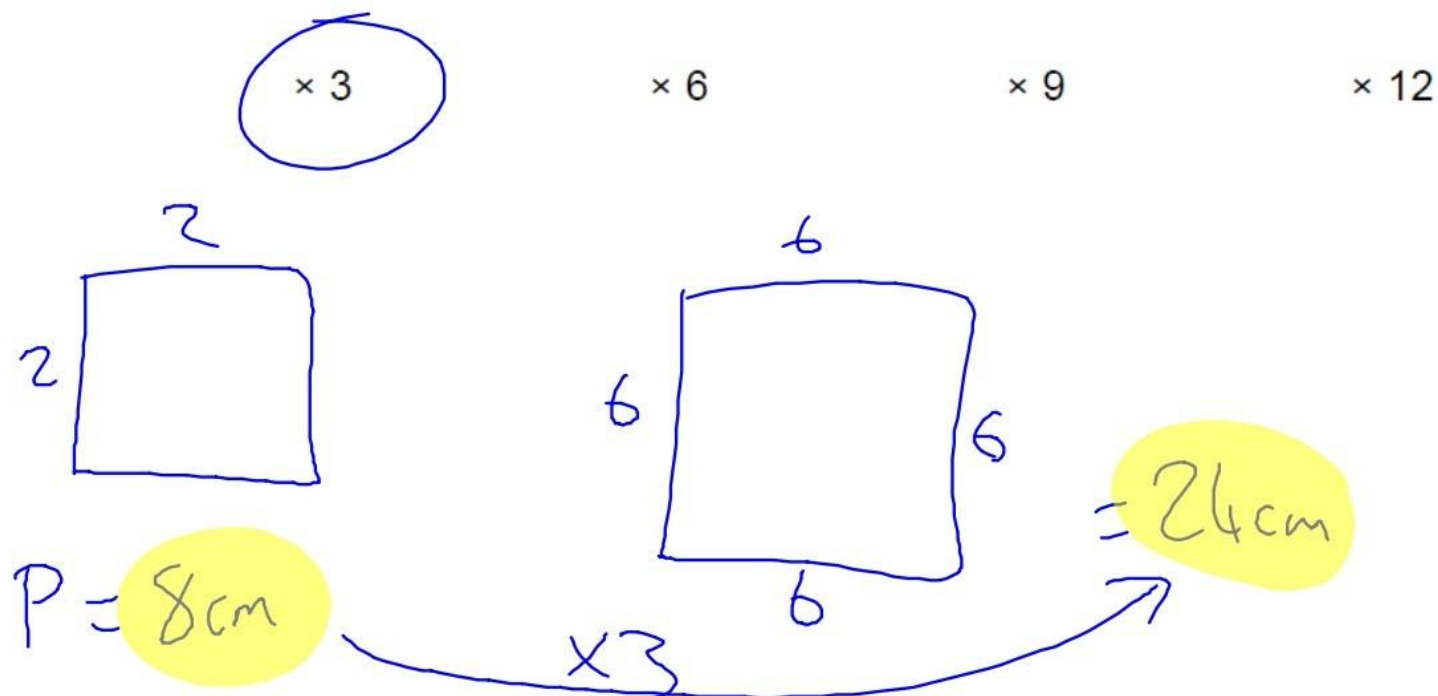
10 Each side of a square is made 3 times as long.

G15

What happens to the perimeter?

Circle your answer.

[1 mark]



14

$ABEF$ and $ACDF$ are rectangles.

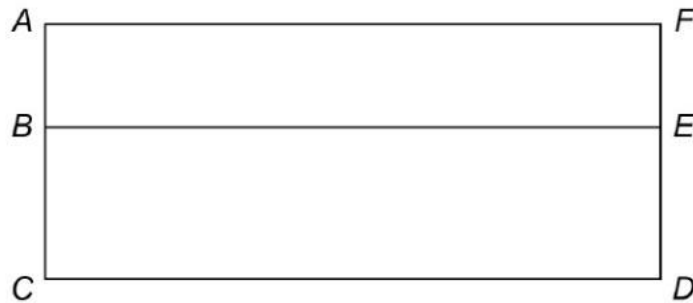
$$AF = 10 \text{ cm}$$

$$AB = 2 \text{ cm}$$

$$BC = 4 \text{ cm}$$

G15

R13



Not drawn
accurately

Work out

perimeter $ABEF$: perimeter $ACDF$

Give your answer in its simplest form.

[3 marks]

Answer _____ : _____

14

 $ABEF$ and $ACDF$ are rectangles.

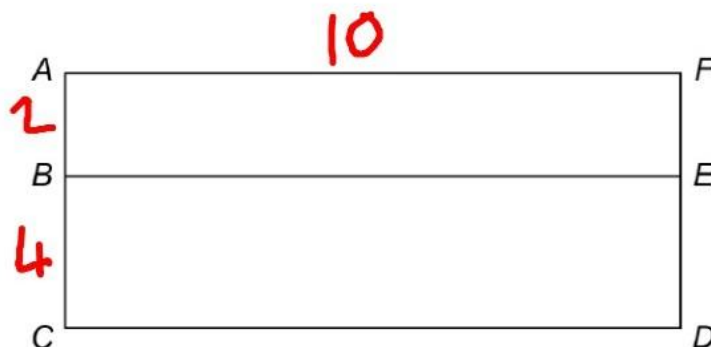
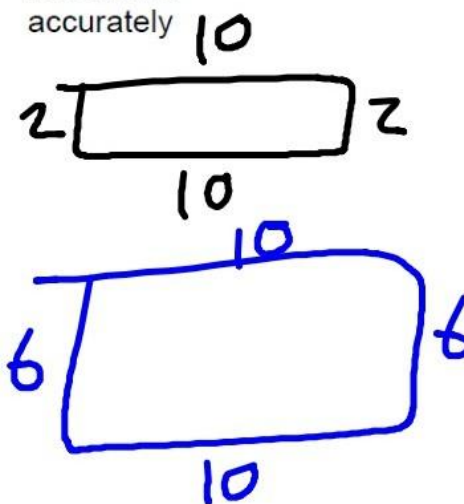
$AF = 10 \text{ cm}$

$AB = 2 \text{ cm}$

$BC = 4 \text{ cm}$

G15

R13

Not drawn
accurately

[3 marks]

Work out

perimeter $ABEF$: perimeter $ACDF$

Give your answer in its simplest form.

$$24 : 32$$

$$3 : 4$$

Answer 3 : 4