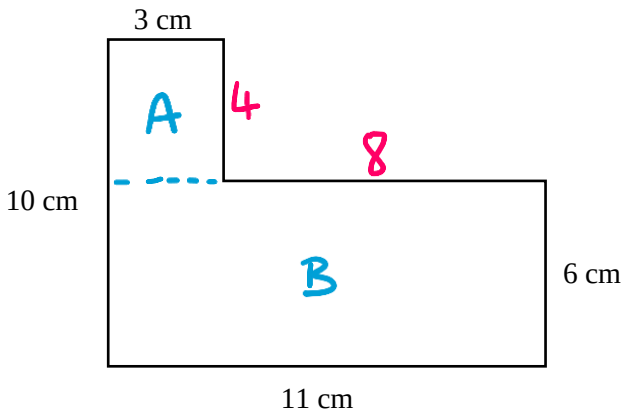
Compound Shapes

SCAN ME

REVISE THIS TOPIC

1 A shape is made from two rectangles.



(a) Work out the perimeter of the shape.

$10 + 3 + 4 + 8 + 6 + 11 = 42$

42 ..... cm

(2)

(b) Work out the area of the shape.

A: $3 \times 4 = 12\text{ cm}^2$

B: $11 \times 6 = 66\text{ cm}^2$

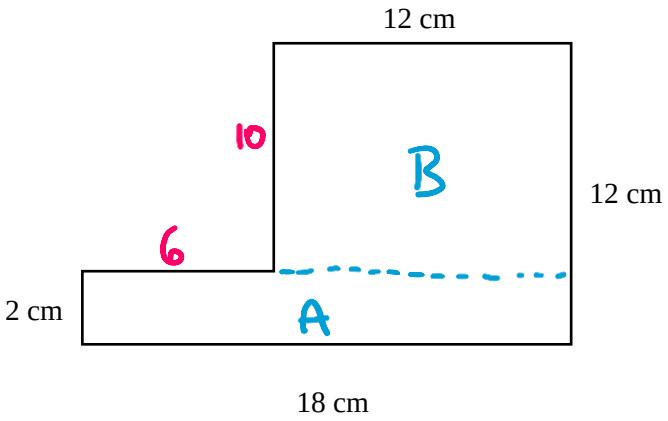
$12 + 66 = 78$

78 ..... cm^2

(3)

(Total for Question 1 is 5 marks)

2 A shape is made from two rectangles.



(a) Work out the perimeter of the shape.

$2 + 18 + 12 + 12 + 10 + 6$

60 cm

(2)

(b) Work out the area of the shape.

A: $2 \times 18 = 36 cm^2$

B: $10 \times 12 = 120 cm^2$

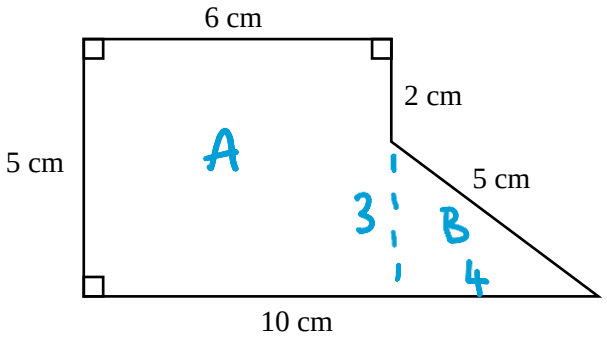
$120 + 36$

156 cm^2

(3)

(Total for Question 2 is 5 marks)

3 Here is a pentagon.



(a) Work out the perimeter of the pentagon.

$5 + 6 + 2 + 5 + 10 = 28$

28 cm

(2)

(b) Work out the area of the pentagon.

A: $6 \times 5 = 30\text{ cm}^2$

B: $\frac{1}{2} \times 4 \times 3 = 6\text{ cm}^2$

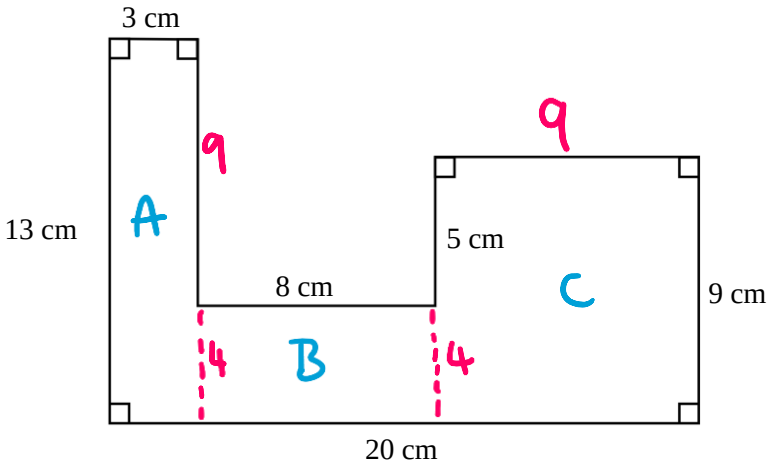
$30 + 6 = 36$

36 cm^2

(3)

(Total for Question 3 is 5 marks)

4 A shape is made from three rectangles.



(a) Work out the perimeter of the shape.

$13+3+9+8+5+9+9+20$

76 cm

(3)

(b) Work out the area of the shape.

A: $13 \times 3 = 39\text{ cm}^2$

B: $8 \times 4 = 32\text{ cm}^2$

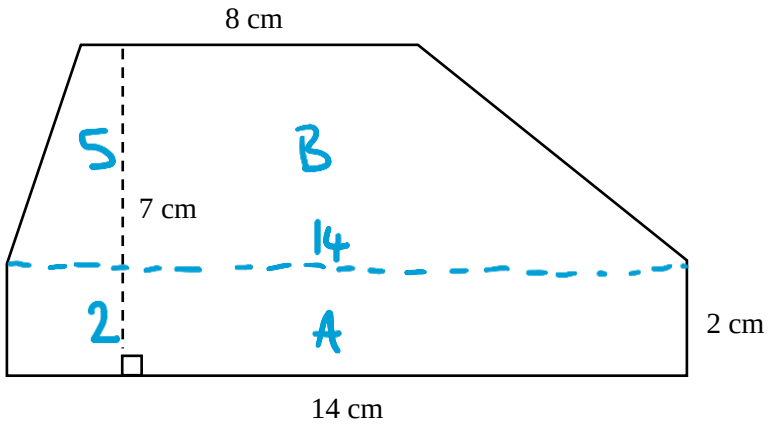
C: $9 \times 9 = 81\text{ cm}^2$

152 cm^2

(4)

(Total for Question 4 is 7 marks)

5 Here is a shape made from a trapezium and a rectangle.



Work out the area of the shape.

A : $14 \times 2 = 28\ cm^2$

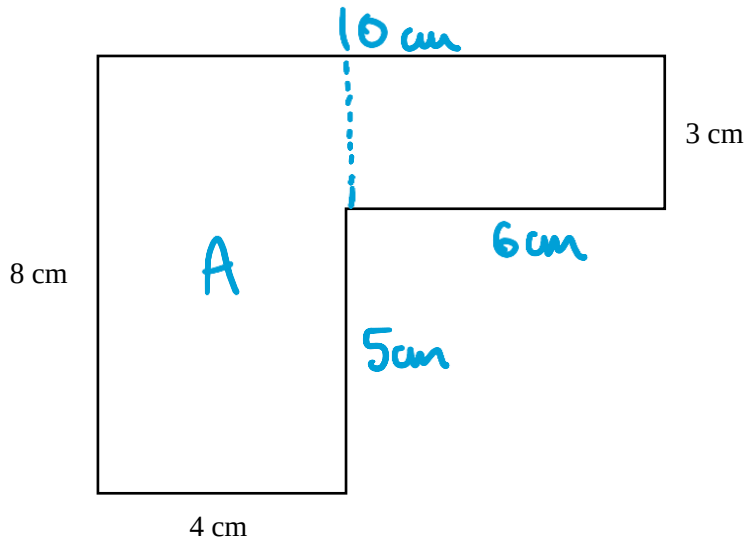
B : $\frac{1}{2}(14+8) \times 5 = 55\ cm^2$

$55 + 28 = 83$

83 ..... cm^2

(Total for Question 5 is 4 marks)

6 A shape is made from rectangles.



The area of the shape is 50 cm^2
Work out the perimeter of the shape.

A : $8 \times 4 = 32 \text{ cm}^2$

$50 - 32 = 18 \text{ cm}^2$

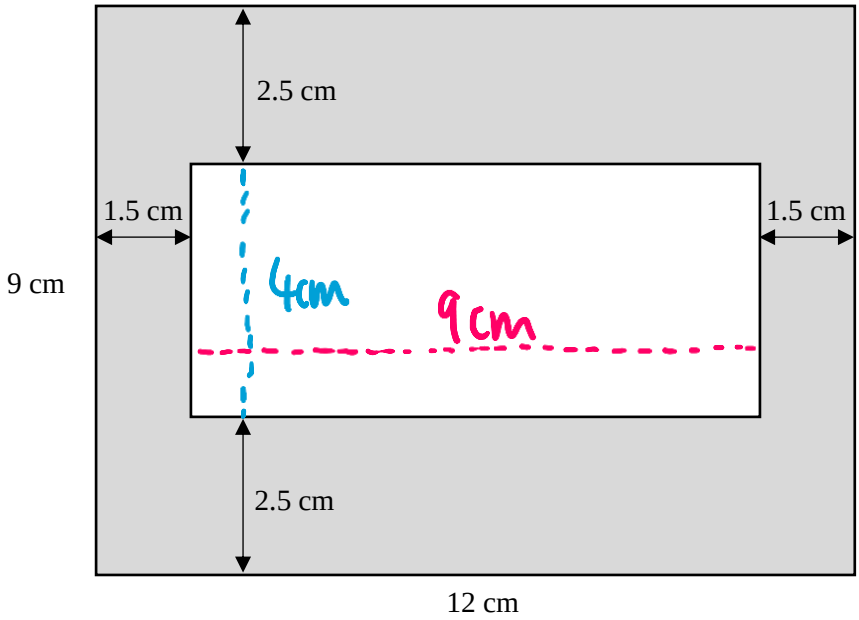
$18 \div 3 = 6$

$8 + 4 + 5 + 6 + 3 + 10 = 36$

36 ..... cm

(Total for Question 6 is 5 marks)

7 A rectangular hole is cut from a larger rectangle.



Work out the area of the shaded region.

$9 - 2.5 - 2.5 = 4$

$12 - 1.5 - 1.5 = 9$

$12 \times 9 = 108$

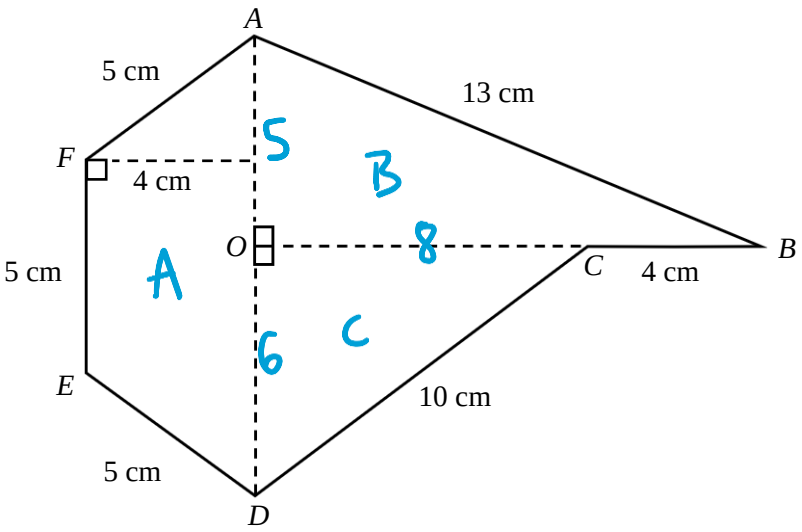
$9 \times 4 = 36$

$108 - 36 = 72$

72 ..... cm^2

(Total for Question 7 is 4 marks)

8 *ABCDEF* is a hexagon made from two right angled triangles and a trapezium.



AO = 5 cm
AD = 11 cm
OC = 8 cm

(a) Work out the perimeter of the shape.

5 + 5 + 5 + 13 + 4 + 10

42 cm

(2)

(b) Work out the area of the shape.

A: $\frac{1}{2}(5+11)\times 4 = 32\ cm^2$

B: $\frac{1}{2} \times 5 \times 12 = 30\ cm^2$

C: $\frac{1}{2} \times 6 \times 8 = 24\ cm^2$

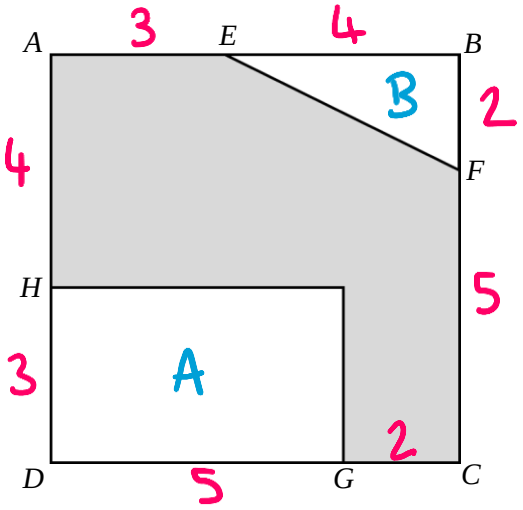
32 + 30 + 24

86 cm^2

(4)

(Total for Question 8 is 6 marks)

9 *ABCD* is a square.



GC = 2cm *AE* = 3cm *EB* = *AH* = 4 cm *FC* = 5cm

Work out the area of shaded region.

$7 \times 7 = 49$

$3 \times 5 = 15$

$\frac{1}{2} \times 2 \times 4 = 4$

$49 - 15 - 4 = 30$

30

30 ..... cm^2

(Total for Question 9 is 5 marks)

