

9.2 Answers

GCSE Mathematics
Ratio and Similarity

Answer 1

$54 \times 63 \times 72$

[2 marks]

Answer 2

(i) 90 cm^2

(ii) $lsf = \frac{4}{3}$

(iii) $asf = \frac{16}{9}$

(iv) 160 cm^2

[2, 1, 1, 2 marks]

Answer 3

(i) F

(ii) F

(iii) T

[1, 1, 1 marks]

Answer 4

(i) $lsf = \frac{3}{2}$

(ii) 15 cm

(iii) $lsf = \frac{2}{3}$

(iv) 40 cm

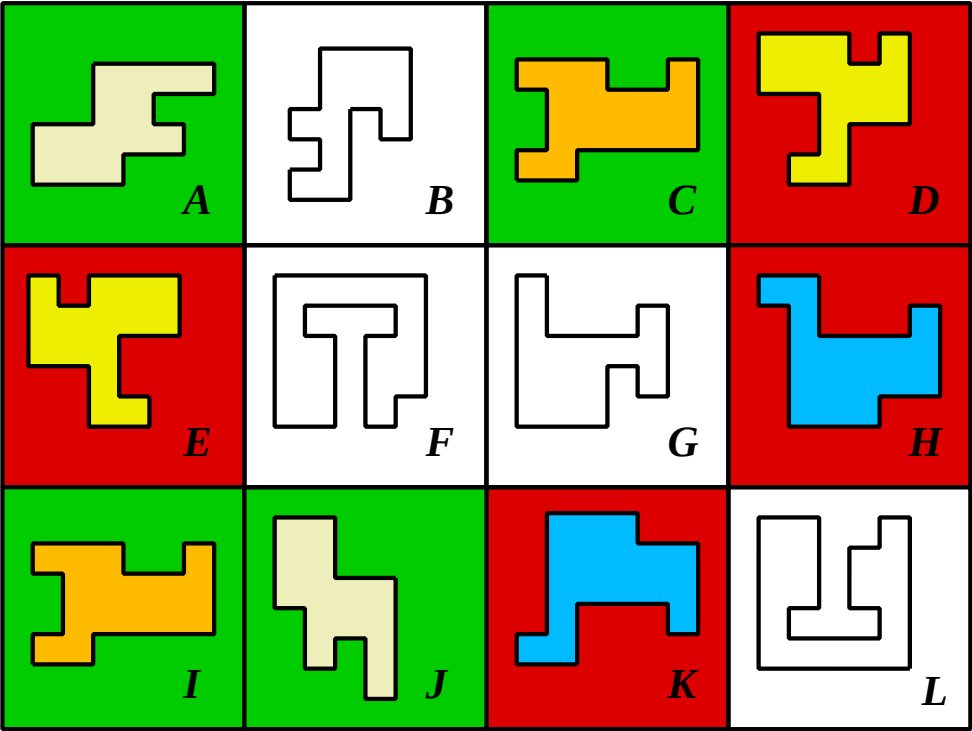
[1, 1, 1, 1 marks]

Answer 5

3

[2 marks]

Answer 6



[6 marks]

Answer 7

36 cm

$$486 - 24 = 462 \text{ cm}^2$$

[3, 3 marks]Yes, $\triangle ABC$ is right angled

Reasoning might consider if Pythagoras' Theorem holds

or if the formula $\text{Area } \triangle = \frac{1}{2} b h$ holds**[2 marks]****Answer 8**

22 cm

$$242 - 32 = 210 \text{ cm}^2$$

[3, 3 marks]No, $\triangle PQR$ is not right angled

Reasoning might consider if Pythagoras' Theorem holds - it doesn't

or if the formula $\text{Area } \triangle = \frac{1}{2} b h$ holds - it doesn't**[2 marks]****Answer 9****(i)**

$$\frac{7}{4}$$

(ii)

$$\frac{4}{3}$$

(iii)

$$\frac{7}{4}$$

[3 marks]**Answer 10****(i)**

4

(ii)

$$4^3 \times 5 = 320$$

[1, 4 marks]