

2.8.6 Solutions to 2.7 Homework

GCSE Mathematics Ratio and Similarity

Answer 1

- (i) 3 [1 mark]
- (ii) 9 [1 mark]
- (iii) 1134 cm^2 [2 marks]
- (iv) The lsf is 3 and the asf is 9 which illustrates that $asf = lsf^2$ [2 marks]

Answer 2

- (i) 50 cm^2 [3 marks]
- (ii) $lsf = \frac{7}{5}$ [1 mark]
- (iii) $asf = \frac{49}{25}$ [1 mark]
- (iv) Area = $50 \times \frac{49}{25} = 98 \text{ cm}^2$ [2 marks]

Answer 3

- (i) 12 cm by 8 cm [3 marks]
- (ii) Full size rectangles [2 marks]

Answer 4

2.6 cm by 1.7 cm [3 marks]

Answer 5

- (i) 8 cm [1 mark]
- (ii) $8 \times 5.333...$ [2 marks]
- (iii) $5.333... \times 3.555...$ [2 marks]
- $18 \times 12 \implies 12 \times 8 \implies 8 \times 5.333... \implies 5.333... \times 3.555...$