

4.5.4 Solutions (4.4 Homework)

GCSE Mathematics Ratio and Similarity

Question 1

(i)

$$\frac{9}{4}$$

(ii)

$$\frac{64}{169}$$

(iii)

$$\frac{25}{36}$$

(iv)

$$\frac{8}{27}$$

(v)

$$\frac{125}{343}$$

(vi)

$$\frac{343}{64}$$

(vii)

$$\frac{5}{2}$$

(viii)

$$\frac{7}{14}$$

(ix)

$$\frac{6}{11}$$

(x)

$$\frac{3}{8}$$

(xi)

$$\frac{1}{12}$$

(xii)

$$\frac{14}{13}$$

(xiii)

$$\frac{2}{3}$$

(xiv)

$$\frac{1}{10}$$

(xv)

$$\frac{4}{5}$$

(xvi)

$$\frac{1600}{81}$$

(xvii)

$$\frac{125}{64}$$

(xviii)

$$1$$

[18 marks]

Question 2

(i)

$$\frac{3}{2}$$

(ii)

$$\frac{7}{5}$$

(iii)

$$\frac{7}{6}$$

(iv)

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

(v)

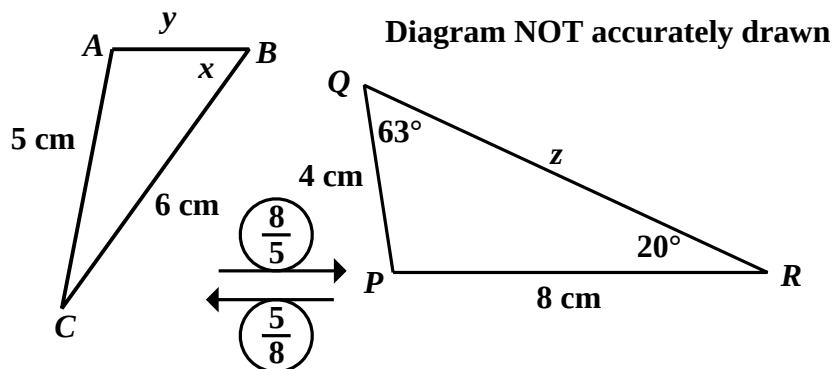
$$\frac{11}{25}$$

(vi)

$$\frac{7}{3}$$

[12 marks]

Answer 3

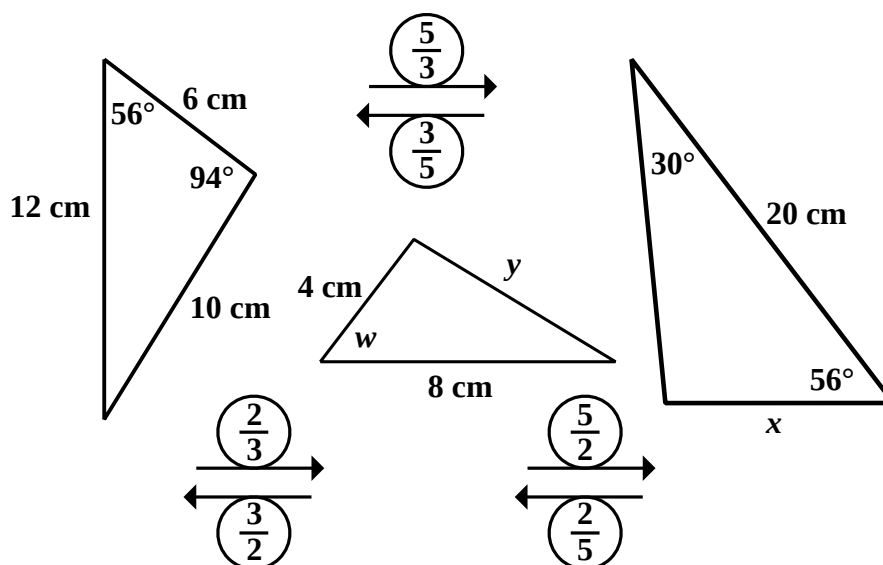


$$x = 63^\circ \quad y = 4 \times \frac{5}{8} \quad z = 6 \times \frac{8}{5}$$

$$y = 2.5 \text{ cm} \quad z = 9.6 \text{ cm}$$

[5 marks]

Answer 4



- (a) $w = 56^\circ$
 (b) $x = \frac{5}{3} \times 6 = 10 \text{ cm}$
 (c) $y = \frac{2}{5} \times 20 = 6 \frac{2}{5} \text{ cm}$

[5 marks]