

KS3 – Perimeter & Area – Answers

Section A – Perimeter

Q1

- a) 28 cm
- b) 26 cm
- c) 33 cm
- d) 30 cm

Q2

- a) 6 cm
- b) 9 cm
- c) 14 cm
- d) 9 cm

Q3

- a) 38 m
- b) 72 m
- c) 80 cm

Q4

- a) 36 cm
- b) 22 cm
- c) 32 cm

Q5

$$2(23 + w) = 74$$

$$23 + w = 37$$

$$w = 14 \text{ m}$$

Section B – Area of Shapes

Q6

- a) 40 cm^2
- b) 81 cm^2
- c) 84 m^2
- d) 169 m^2

Q7

- a) 30 cm^2
- b) 35 m^2
- c) 36 cm^2

Q8

- a) 40 cm^2
- b) 84 m^2
- c) 60 cm^2

Q9

- a) 32 cm^2
- b) 60 m^2
- c) 60 cm^2

Q10

- a) 66 cm^2
- b) 42 cm^2
- c) 54 cm^2
- d) 55 cm^2

Q11

- a) 120 m^2
- b) 36 m^2
- c) 90 cm^2

Section C – Compound Shapes

Q12

a) 39 cm^2

b) 60 m^2

Q13

a) 30 cm

b) 38 m

Q14

Outer rectangle = $10 \times 9 = 90 \text{ m}^2$.

Missing rectangle = $6 \times 5 = 30 \text{ m}^2$.

Area = 60 m^2 .

Q15

Rectangle area = $10 \times 6 = 60 \text{ cm}^2$.

Triangle area = $\frac{1}{2} \times 10 \times 4 = 20 \text{ cm}^2$.

Total area = 80 cm^2 .

Q16

Garden area = $14 \times 10 = 140 \text{ m}^2$.

Pond area = $5 \times 3 = 15 \text{ m}^2$.

Uncovered area = 125 m^2 .

Section D – Circles

Q17

- a) Radius
- b) Diameter
- c) 12 cm

Q18

- a) 31.4 cm
- b) 37.7 cm
- c) 50.3 m
- d) 62.8 m

Q19

- a) 50.3 cm^2
- b) 153.9 cm^2
- c) 78.5 m^2
- d) 201.1 m^2

Q20

- a) 37.7 cm
- b) 153.9 cm^2
- c) 39.3 cm^2

Q21

- a) 100.5 cm^2
- b) 56.5 m^2
- c) 78.5 cm^2

Q22

- a) 31.4 m
- b) 78.5 m^2