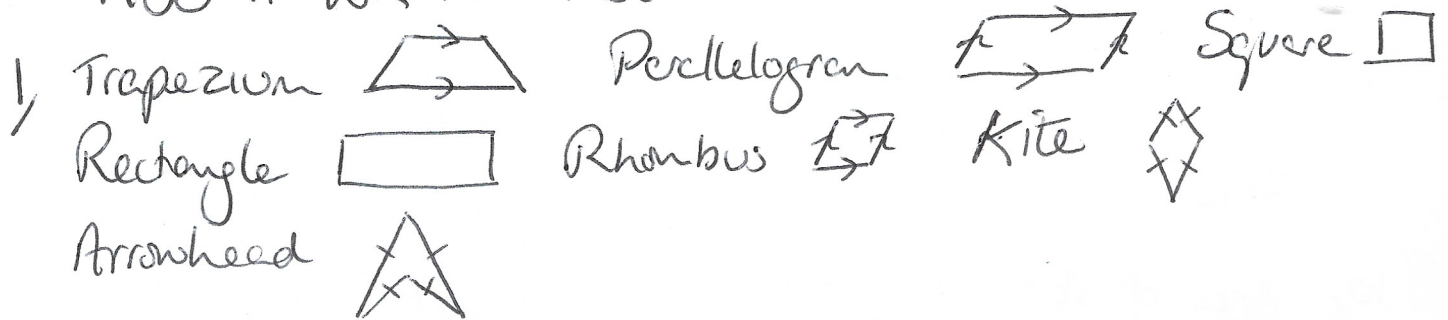


KS3 H wk 10 Answers



2, a, Area = $7 \times 3 = 21 \text{ cm}^2$ b, $A = 36 \text{ cm}^2$ c, $A = 140 \text{ mm}^2$
 d, $\frac{4}{9} \times \frac{7}{8} = \frac{7}{18} \text{ cm}^2$ e, $10 \cdot 64 \text{ cm}^2$ f, $(12 \times 2) + (5 \times 2) = 34 \text{ cm}^2$
 g, $(10 \times 2) + (4 \times 5)$ h, $A = \frac{5 \times 8}{2} = 20 \text{ cm}^2$ i, $38 \cdot 5 \text{ cm}^2$ j, 109 mm^2
 k, $100 \cdot 9 \text{ m}^2$ l, $(7 \times 2) + \frac{3 \times 2}{2} = 14 + 3 = 17 \text{ cm}^2$
 m, $10 \times 14 + \frac{6 \times 8}{2} = 140 + 24 = 168 \text{ m}^2$

3, a, Perimeter = $7 + 7 + 3 + 3 = 20 \text{ cm}$ b, $P = 6 \times 4 = 24 \text{ cm}$ c, $P = 78 \text{ mm}$
 d, $P = (\frac{4}{9} + \frac{7}{8}) \times 2 \Rightarrow (\frac{32}{72} + \frac{63}{72}) \times 2 \Rightarrow \frac{190}{72} \Rightarrow 2 \frac{23}{36} \text{ cm}$
 e, $P = 13 \cdot 2 \text{ cm}$ f, $P = 38 \text{ cm}$ g, $P = 10 + 2 + 3 + 5 + 4 + 5 + 3 + 2 = 34 \text{ cm}$

4 Area Parallelogram = $b \times h$ Area Trapezium = $\frac{1}{2}(a+b)h$
 OR $\frac{a+b}{2} \times h$
 can be written

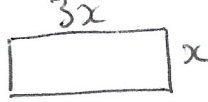
5, a, $4 \times 8 = 32 \text{ cm}^2$ b, $\frac{10+12}{2} \times 6 = 11 \times 6 = 66 \text{ cm}^2$ c, $14 \times 5 = 70 \text{ cm}^2$
 d, $\frac{3+4+4+6}{2} \times 8 = \frac{8}{2} \times 8 = 4 \times 8 = 32 \text{ cm}^2$
 e, $\frac{11+19}{2} \times 30 = 15 \times 30 = 450 \text{ cm}^2$ f, $\frac{9+13}{2} \times 6 = 66 \text{ cm}^2$

6, $9 \times 4 = [36]$ $36 - 3 \cdot 6 = 32 \cdot 4 \text{ cm}$ b, Outer $\square = 14 \times 10 = [140 \text{ cm}^2]$
 $3 \times 1 \cdot 2 = [3 \cdot 6]$ $\Delta = \frac{5 \times 8}{2} = [20 \text{ cm}^2]$
 Shaded Area = 120 cm^2

7, a, $x \times 12 = 18$ b, $x^2 = 25$ c, $\frac{8 \times x}{2} = 20$ $x = 5 \text{ cm}$
 $x = 18 \div 12 = 1 \cdot 5 \text{ cm}$ $x = 5 \text{ cm}$

d, $\frac{x+14}{2} \times 4 = 44$
 $\frac{x+14}{2} = 11$
 $x+14 = 22$
 $x = 8 \text{ cm}$

8, $36 \div 4 = 9$ $x = 9\text{cm}$ $y = 9 - 2 \cdot 3 = 6 - 7\text{cm}$

9,  Perimeter = $8x = 48$
 $x = 48 \div 8 = 6\text{cm}$

Area = $18 \times 6 = 108\text{cm}^2$

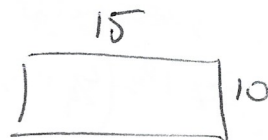
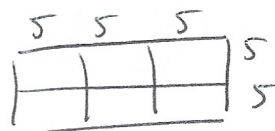
10, Perimeter of Triangle = $22 + 17 + 25 = 64\text{cm}$

Perimeter of Square = 64cm

side length = $64 \div 4 = 16\text{cm}$

11, if the perimeter of the square = 20cm
 one side length = $20 \div 4 = 5\text{cm}$

rectangle dimensions



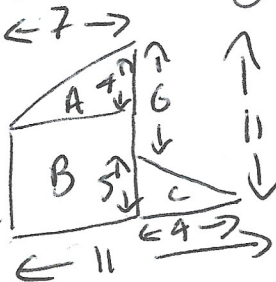
Area of rectangle = $15 \times 10 = 150\text{cm}^2$

OR

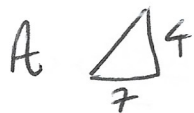
find area of square

square $\rightarrow 5 \times 5 = 25$

Then \times by 6 = 150cm^2



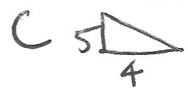
Area \Rightarrow



$4 \times \frac{7}{2} = 14\text{m}^2$



$7 \times 7 = 49\text{m}^2$ +



$5 \times \frac{4}{2} = 10\text{m}^2$
73m²

one box covers 20m^2 $\therefore 73\text{m}^2$ will need 4 boxes

$\pounds 4.50 \times 4 = \pounds 18$