

Name:

Worksheet(3) Area

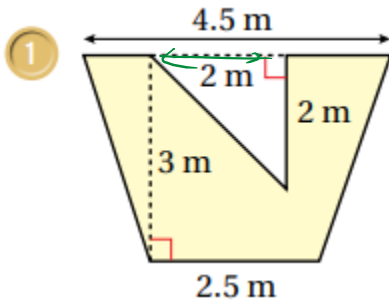
Grade:6(A)

Subject : Math

Date :

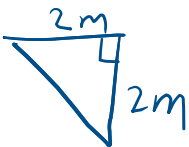
Objective: Find the area of composite shapes.

Exercise: Calculate the area of each of the following composite shapes :



$$\begin{aligned}
 \textcircled{1} \quad A &= \frac{1}{2} (b_1 + b_2) \times h \\
 &\text{trapezium} \\
 &= \frac{1}{2} (4.5 + 2.5) \times 3 \\
 &= \frac{1}{2} \times 7 \times 3 \\
 &= \frac{21}{2} = \textcircled{10.5} \text{ m}
 \end{aligned}$$

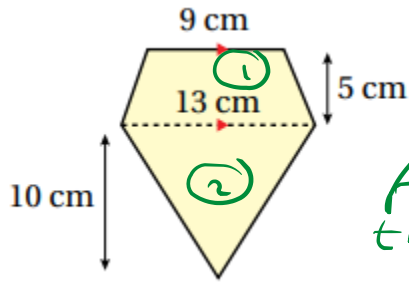
$$\begin{array}{r}
 10 \cdot 5 \\
 2 \overline{) 210} \\
 \underline{20} \\
 10 \\
 \underline{10} \\
 0
 \end{array}$$



$$\begin{aligned}
 \textcircled{2} \quad A &= \frac{1}{2} \times b \times h \\
 &= \frac{1}{2} \times 2 \times 2 \\
 &= \boxed{2} \text{ m}
 \end{aligned}$$

$$\begin{aligned}
 \textcircled{3} \quad \rightarrow A &= 10.5 - 2 = \boxed{8.5} \text{ m} \\
 &\text{shaded}
 \end{aligned}$$

2



$$A = A_{\text{total trapezium}} + A_{\text{triangle}}$$

$$A_{\text{trapezium}} = \frac{1}{2} (b_1 + b_2) \times h$$

$$= \frac{1}{2} (9 + 13) \times 5$$

$$= \frac{1}{2} \times \frac{22}{1} \times \frac{5}{1} = \boxed{55 \text{ cm}^2}$$

2

$$A_{\text{triangle}} = \frac{1}{2} \times b \times h$$

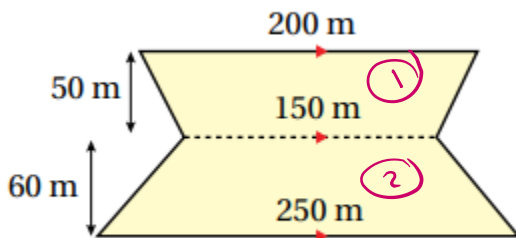
$$= \frac{1}{2} \times \frac{13}{1} \times \frac{5}{1}$$

$$= \boxed{65 \text{ cm}^2}$$

$$A_{\text{total}} = 55 + 65$$

$$= \boxed{120 \text{ cm}^2}$$

3



$$A_{\text{total}} = A_1 + A_2$$

$$A_1 = \frac{1}{2} (b_1 + b_2) \times h$$

$$= \frac{1}{2} (200 + 150) \times 50$$

$$= \frac{1}{2} (350) \times \frac{25}{1}$$

$$= \boxed{8750 \text{ m}^2}$$

$$A_2 = \frac{1}{2} (b_1 + b_2) \times h$$

$$= \frac{1}{2} (150 + 250) \times 60$$

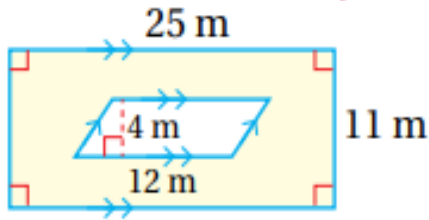
$$= \frac{1}{2} (400) \times 60$$

$$= \boxed{12000 \text{ m}^2}$$

$$A_{\text{total}} = 8750 + 12000$$

$$= \boxed{20750 \text{ m}^2}$$

4



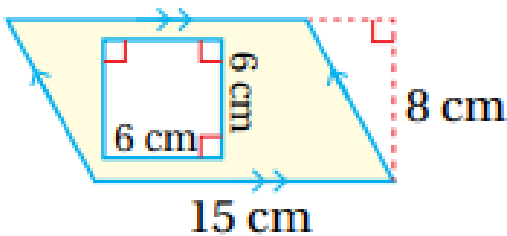
$$\begin{aligned} \textcircled{1} \quad A &= L \times w \\ \text{Rectangle} &= 25 \times 11 \\ &= \boxed{275} \text{ m}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad A_{\text{Parallelogram}} &= b \times h \\ &= 12 \times 4 \\ &= \boxed{48} \text{ m}^2 \end{aligned}$$

$$\textcircled{3} \quad A_{\text{shaded}} = 275 - 48 = \boxed{227} \text{ m}^2$$

$$\begin{array}{r} 6 \ 15 \\ 275 \\ - \quad 48 \\ \hline 227 \end{array}$$

5

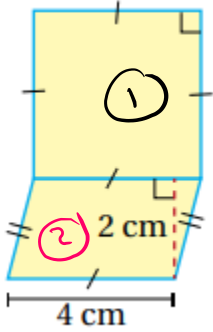


$$\begin{aligned} \textcircled{1} \quad A &= b \times h \\ \text{Parallelogram} &= 15 \times 8 \\ &= \boxed{120} \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad A &= L^2 \\ \text{Square} &= (6)^2 \\ &= \boxed{36} \text{ cm}^2 \end{aligned}$$

$$\textcircled{3} \quad A_{\text{shaded}} = 120 - 36 = \boxed{84} \text{ cm}^2$$

6

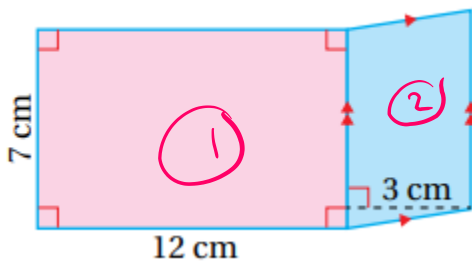


$$\begin{aligned} \textcircled{1} \quad A_1 &= L^2 \\ &= (4)^2 = \boxed{16 \text{ cm}^2} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad A_2 &= b \times h \\ &= 4 \times 2 \\ &= \boxed{8 \text{ cm}^2} \end{aligned}$$

$$\textcircled{3} \quad A_{\text{total}} = A_1 + A_2 = 16 + 8 = \boxed{24 \text{ cm}^2}$$

7



$$\begin{aligned} \textcircled{1} \quad A_1 &= L \times w \\ &= 12 \times 7 \\ &= \boxed{84 \text{ cm}^2} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad A_2 &= b \times h \\ &= 7 \times 3 \\ &= \boxed{21 \text{ cm}^2} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad A_{\text{total}} &= A_1 + A_2 \\ &= 84 + 21 = \boxed{105 \text{ cm}^2} \end{aligned}$$