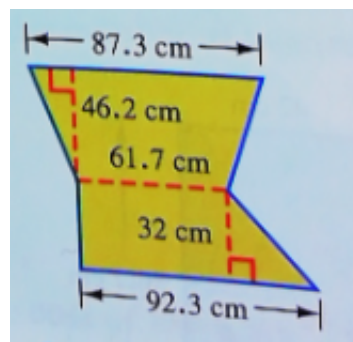


Warm-Up

Find the area of the figure
to the right



7.3 Answers

2 4480 ft

4 64 in

9 19.25 ft²10 100 in²11 3099.6 cm²

14 585.68

15 437.5 in²18 201.25 ft²21 25344 ft²

7.4 Triangles

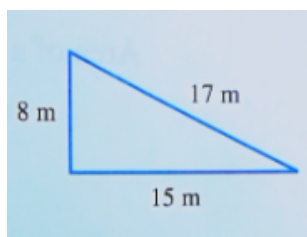
Definition \downarrow 3 sided figure

Perimeter of Triangle Formula

$$P = \text{sum of all sides}$$

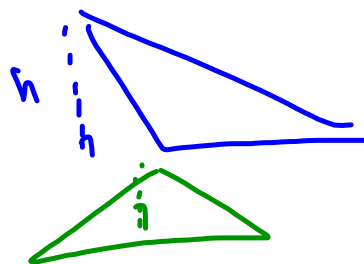
Ex 1 Find the perimeter

$$P = 8 + 17 + 15$$
$$P = 40\text{m}$$

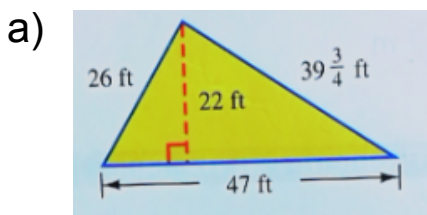


Area of Triangle Formula

$$A = \frac{1}{2} \cdot b \cdot h$$



Ex 2 Find the Area of Triangles



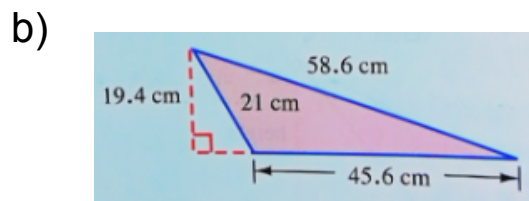
$$A = \frac{1}{2} \cdot b \cdot h$$

$$\frac{1}{2} (47)(22)$$

$$(47)(11)$$

$$A = 517 \text{ ft}^2$$

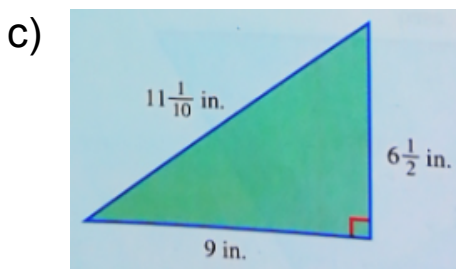
$\frac{9.7}{2\sqrt{19.4}}$



$$A = \frac{1}{2} (19.4)(45.6)$$

$$(9.7)(45.6)$$

$$A = 442.32 \text{ cm}^2$$



$$A = \frac{1}{2} (9)(6.5)$$

$$(4.5)(6.5)$$

$$29.25 \text{ in}^2$$

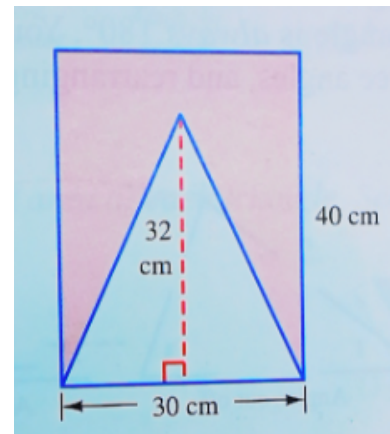
Ex 3 Using Concept of Area

Find the area of the shaded region

$$\textcircled{1} A = b \cdot h \quad \textcircled{2} A = \frac{1}{2} b h$$

$$1200 \text{ cm}^2 \quad 480 \text{ cm}^2$$

$$\begin{array}{r} 1200 \\ 480 \\ \hline 720 \text{ cm}^2 \end{array}$$



Ex 4 Applying the Concept of Area

The DOT cuts triangle signs out of rectangular pieces of metal using the measurements above. If the metal costs \$0.02 per square cm, how much does the metal cost for the sign? What is the cost of the metal not used?

$$\triangle \quad \begin{array}{r} 480 \\ \times 2 \\ \hline 960 \end{array}$$

$$\$ 19.90$$