

MATHEMATICS – COMPUTATION

AREA of a TRIANGLE

5

To find the area of a triangle, multiply the base by the height, and then divide by 2.

Why do we divide by 2?

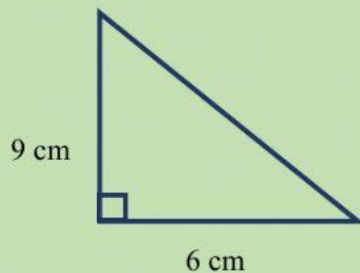
The division by 2 comes from the fact that a parallelogram can be divided into 2 triangles.



Formula (solution)

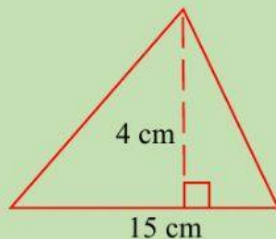
$$A = \frac{1}{2} b \times h \quad A = \frac{b \times h}{2}$$

- Find the area of a right triangle with a base of 6 centimeters and a height of 9 centimeters.



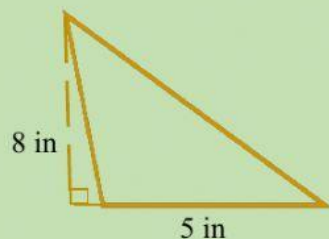
$$\begin{aligned} A &= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \text{ cm}^2 \end{aligned}$$

- Find the area of an acute triangle with a base of 15 inches and a height of 4 inches



$$\begin{aligned} A &= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \text{ cm}^2 \end{aligned}$$

- Find the area of an obtuse triangle with a base of 5 inches and a height of 8 inches.



$$\begin{aligned} A &= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} \\ A &= \underline{\hspace{2cm}} \text{ in}^2 \end{aligned}$$