

Areas of Triangles

Vocabulary

- o Perpendicular – two intersecting lines forming right angles

Formula

1. Area of a Triangle: $A = \frac{bh}{2}$ **OR** $A = \frac{1}{2}bh$

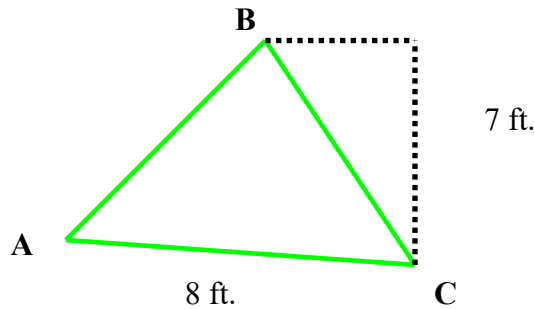
**** IMPORTANT ****

When finding area – Units are always squared.

EXAMPLES

Make sure to show the formula used and each step to receive full credit.
Label, label, label

1. Find the area of triangle ABC



$$A = \frac{bh}{2}$$

$$A = \frac{(8ft)(7ft)}{2} \quad \text{[show multiplication/division work – no calculator]}$$

$$A = \frac{56ft^2}{2}$$

$$A = 28 \text{ ft.}^2 \quad \text{OR} \quad 28 \text{ ft. sq.} \quad \text{OR} \quad 28 \text{ sq. ft.}$$

Chapter 9
Math 7
Class Notes

2. Find the base of a triangle with a height of 6 inches and an area of 12 square inches.

** Figure out what you are solving for in the formula $A = \frac{bh}{2}$ **

In this problem it is the base – so write down what you know

$$\begin{array}{l} A = 12 \text{ sq. in.} \\ h = 6 \text{ in.} \\ b = b \end{array} \left. \vphantom{\begin{array}{l} A = 12 \text{ sq. in.} \\ h = 6 \text{ in.} \\ b = b \end{array}} \right\} \text{ PLUG IN WHAT YOU KNOW}$$

$$A = \frac{bh}{2}$$

$$12 \text{ sq. in.} = \frac{b(6\text{in})}{2} \text{ (multiply both sides by 2) OR (simplify fraction if you can)}$$


$$24 \text{ sq. in.} = (6 \text{ in})b \quad \text{(divide both sides by 6 in)}$$

Reminder - when you divide something by itself it is 1

$$\frac{24\text{sq.in.}}{6\text{in.}} = \frac{(6\text{in})(b)}{(6\text{in})} \text{ [show multiplication/division work – no calculator]}$$

$$\mathbf{4 \text{ in.} = b}$$

Textbook pages 254-255