

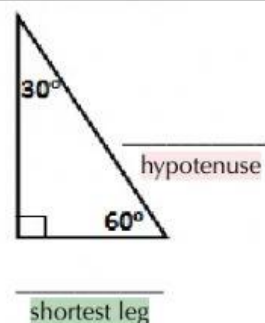
## Special Right Triangles: 30-60-90

In a 30-60-90 triangle:

- \* There is a \_\_\_\_ degree angle, \_\_\_\_ degree angle, and a \_\_\_\_ degree angle

**The Rules:**

- \* The hypotenuse is 2 times the length of the shortest leg
- \* The longer leg is  $\sqrt{3}$  times the length of the shortest leg



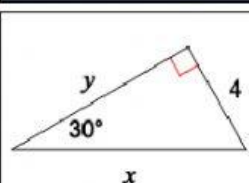
$$\text{longest leg} = \text{shortest leg}(\sqrt{3})$$

$$\text{shortest leg} = \frac{\text{longest}}{\sqrt{3}}$$

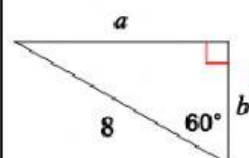
$$\text{hypotenuse} = 2 * \text{shortest leg}$$

$$\text{shortest leg} = \frac{\text{hypotenuse}}{2}$$

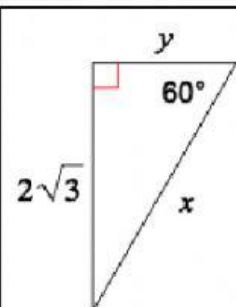
### EXAMPLES



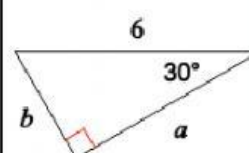
Given:



Given:



Given:



Given: