

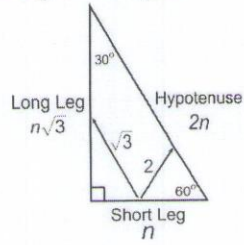
Name \_\_\_\_\_

Trigonometry Prerequisite: Special Right Triangles

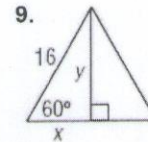
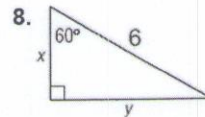
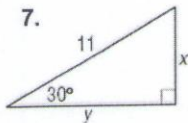
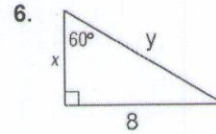
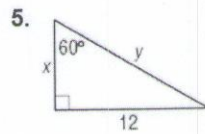
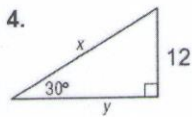
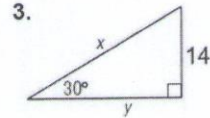
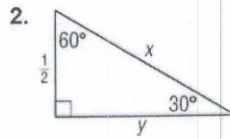
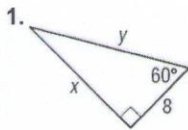
**Special Right Triangles: 30° - 60° - 90°**

Hypotenuse = 2 \* Short Leg

Long Leg = Short Leg \*  $\sqrt{3}$



Find the value of x and y in each triangle.



Sketch the figure that is described. Then, find the requested measure.

10. An equilateral triangle has a side length of 10 inches. Find the length of the triangles altitude.

11. The altitude of an equilateral triangle is 18 inches. Find the length of a side.

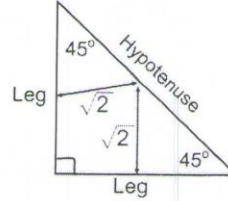
Name \_\_\_\_\_

Trigonometry Prerequisite: Special Right Triangles

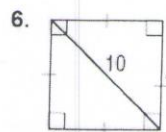
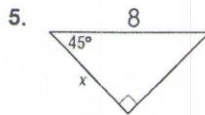
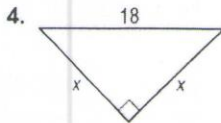
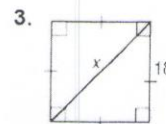
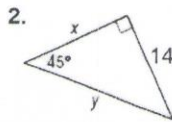
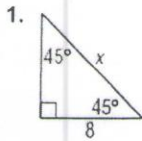
**Special Right Triangles: 45° - 45° - 90°**

Hypotenuse = Leg \*  $\sqrt{2}$

Leg =  $\frac{\text{hypotenuse}}{\sqrt{2}}$



Find the value of x in each triangle.



Sketch the figure that is described. Find the requested measure.

7. The perimeter of a square is 48 meters. Find the length of a diagonal.

8. The perimeter of a square is 20 cm. Find the length of a diagonal.

Find the value of x and y in each figure.

