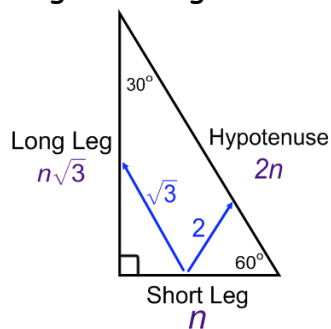


Trigonometry Prerequisite: Special Right Triangles

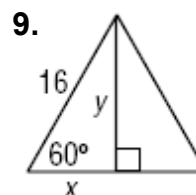
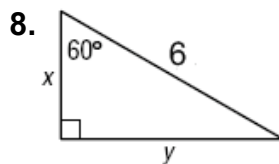
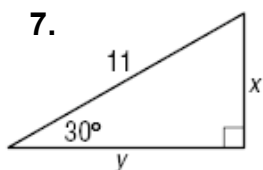
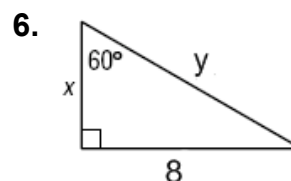
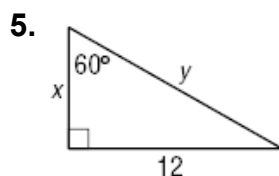
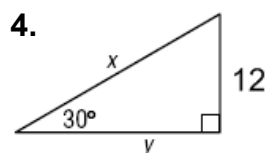
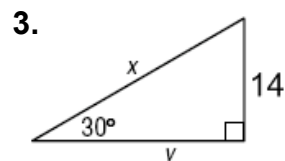
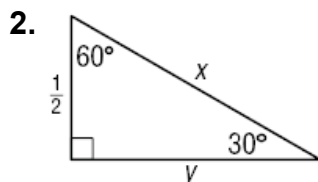
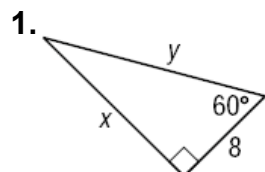
Special Right Triangles: 30° - 60° - 90°

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.

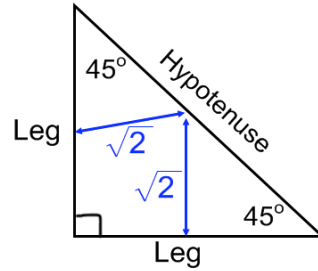
11. The altitude of an equilateral triangle is 18 inches. Find the length of a side.

Trigonometry Prerequisite: Special Right Triangles

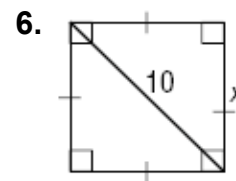
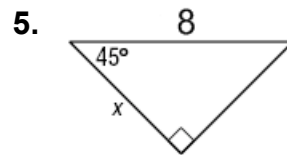
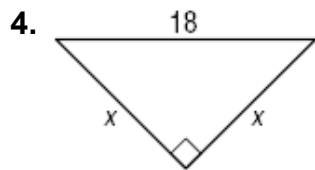
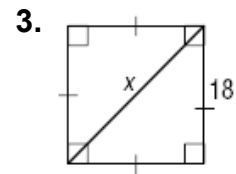
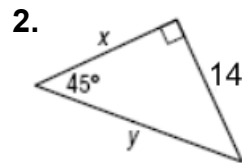
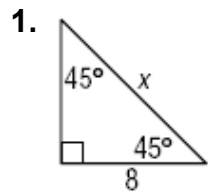
Special Right Triangles: 45° - 45° - 90°

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

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



Find the value of x in each triangle.

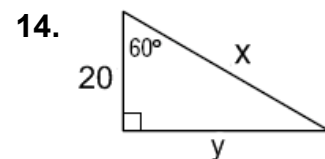
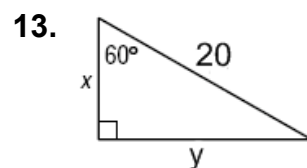
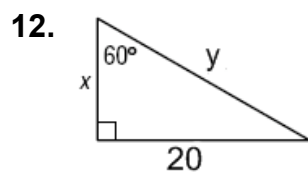
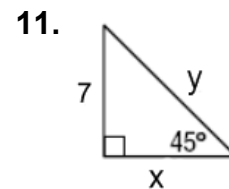
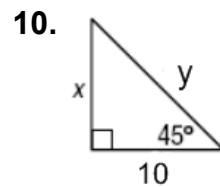
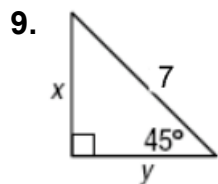


Sketch the figure that is described. Find the requested measure.

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.

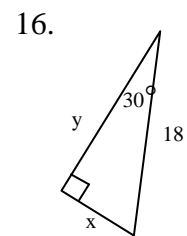
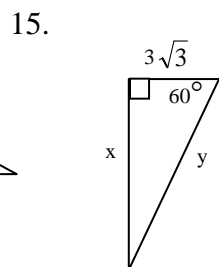
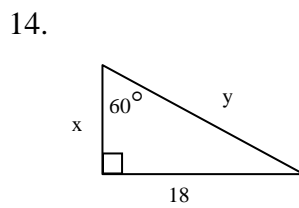
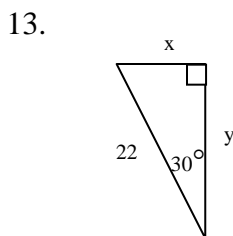
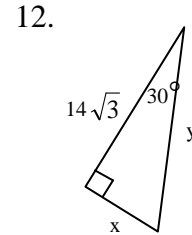
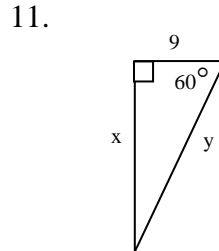
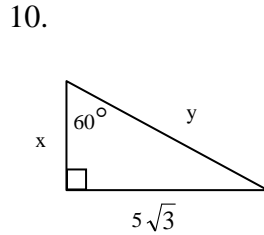
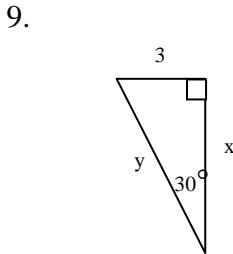
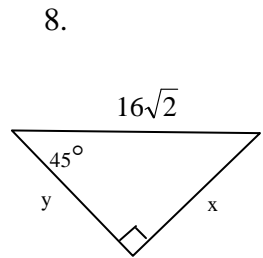
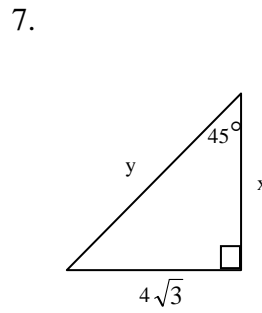
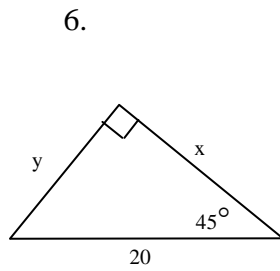
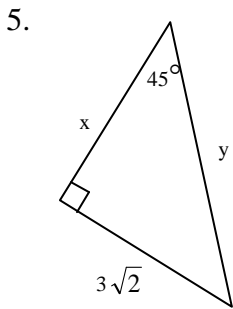
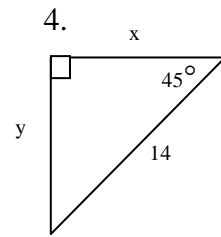
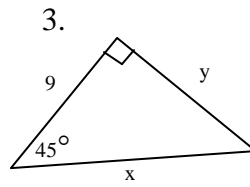
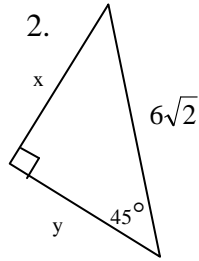
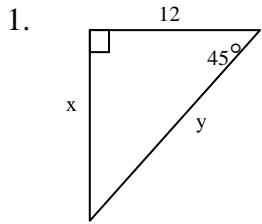
Find the value of x and y in each figure.



Name: _____

Practice Worksheet
Special Right Triangles

Find x and y in each right triangle:



Name: _____ Per: _____ Date: _____

Answer Sheet for Homework

<p>1.</p> <p>X= _____</p> <p>Y= _____</p>	<p>2.</p> <p>X= _____</p> <p>Y= _____</p>	<p>3.</p> <p>X= _____</p> <p>Y= _____</p>
<p>4.</p> <p>X= _____</p> <p>Y= _____</p>	<p>5.</p> <p>X= _____</p> <p>Y= _____</p>	<p>6.</p> <p>X= _____</p> <p>Y= _____</p>
<p>7.</p> <p>X= _____</p> <p>Y= _____</p>	<p>8.</p> <p>X= _____</p> <p>Y= _____</p>	<p>9.</p> <p>X= _____</p> <p>Y= _____</p>
<p>10.</p>		<p>11.</p>

Pg. 2 --- 1.

X= _____

2.

X= _____

Y= _____

3.

X= _____

4.

X= _____

X= _____

5.

X= _____

6.

X= _____

7.

8.

9.

X= _____

Y= _____

10.

X= _____

Y= _____

11.

X= _____

Y= _____

12.

X= _____

Y= _____

13.

X= _____

Y= _____

14.

X= _____

Y= _____

Pg. 3 --- 1.

X= _____

Y= _____

2.

X= _____

Y= _____

3.

X= _____

Y= _____

4.

X= _____

Y= _____

5.

X= _____

Y= _____

6.

X= _____

Y= _____

7.

X= _____

Y= _____

8.

X= _____

Y= _____

9.

X= _____

Y= _____

10.

X= _____

Y= _____

11.

X= _____

Y= _____

12.

X= _____

Y= _____

13.

X= _____

Y= _____

14.

X= _____

Y= _____

15.

X= _____

Y= _____

16.

X= _____

Y= _____