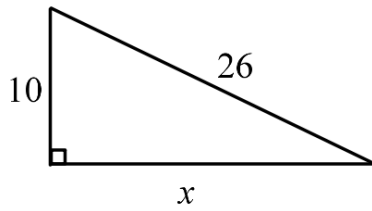


Pythagorean Theorem and Special Right Triangles

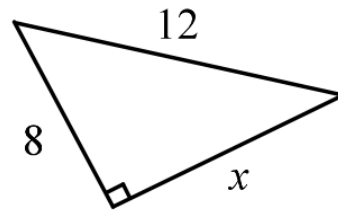
Pythagorean Theorem – Give the exact answer (radical form).

1.)



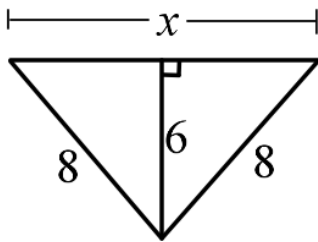
$x =$ _____

2.)



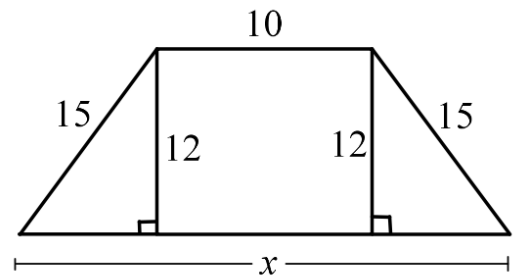
$x =$ _____

3.)



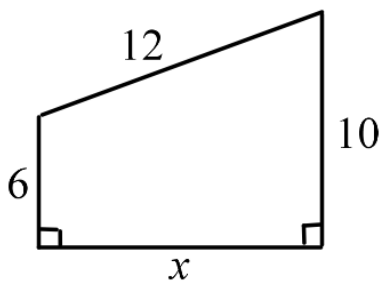
$x =$ _____

4.)

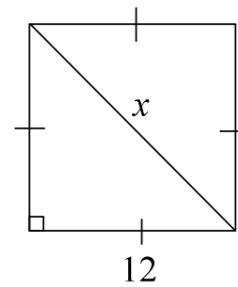


$x =$ _____

5.)



6.)

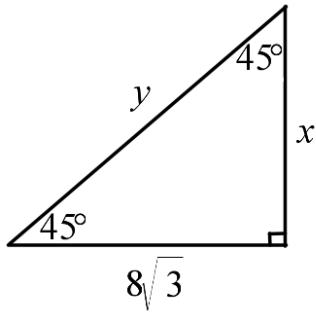


$x = \underline{\hspace{2cm}}$

$x = \underline{\hspace{2cm}}$

Special Right Triangles – Give the exact answer (radical form).

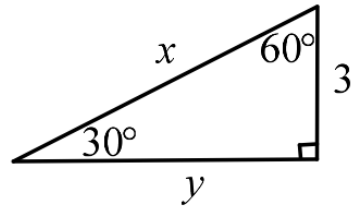
7.)



$x = \underline{\hspace{2cm}}$

$y = \underline{\hspace{2cm}}$

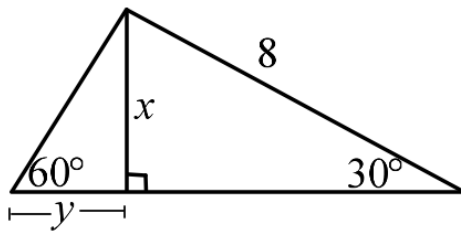
8.)



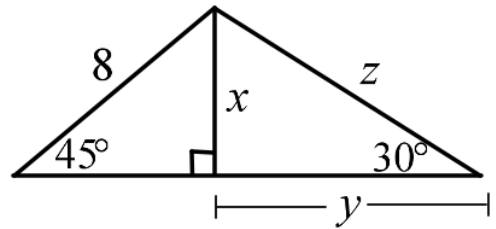
$x = \underline{\hspace{2cm}}$

$y = \underline{\hspace{2cm}}$

9.)



10.)



$x = \underline{\hspace{2cm}}$

$y = \underline{\hspace{2cm}}$

$x = \underline{\hspace{2cm}}$

$y = \underline{\hspace{2cm}}$

$z = \underline{\hspace{2cm}}$

11.) 30-60-90 Triangle:

Short Leg to Hypotenuse: Multiply by $\underline{\hspace{2cm}}$

Short Leg to Long Leg: Multiply by $\underline{\hspace{2cm}}$

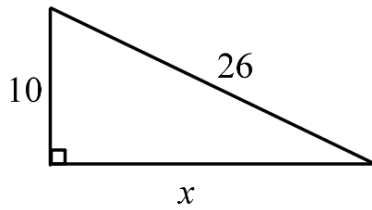
12.) 45-45-90 Triangle:

Leg to Hypotenuse: Multiply by _____

Pythagorean Theorem and Special Right Triangles – Answers

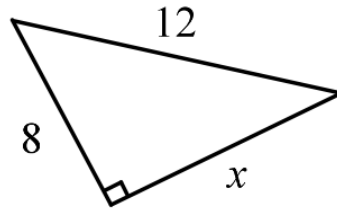
Pythagorean Theorem – Give the exact answer (radical form).

1.)



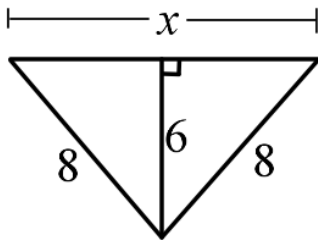
$$x = 24$$

2.)



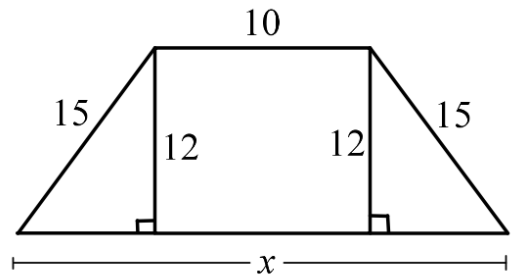
$$x = 4\sqrt{5}$$

3.)



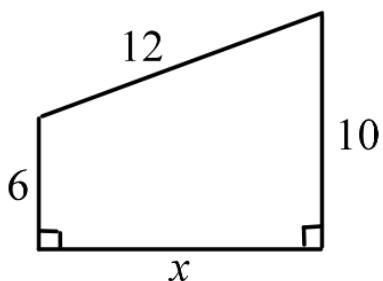
$$x = 4\sqrt{7}$$

4.)

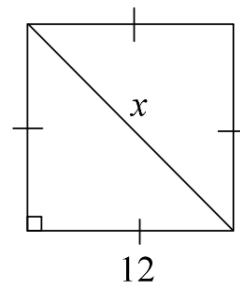


$$x = 28$$

5.)



6.)

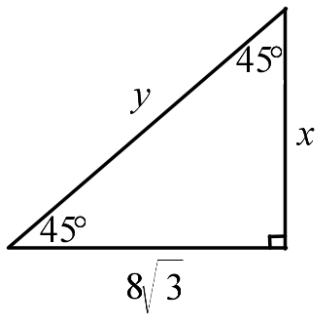


$$x = 8\sqrt{2}$$

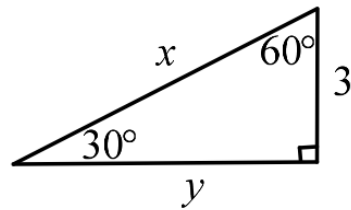
$$x = 12\sqrt{2}$$

Special Right Triangles – Give the exact answer (radical form).

7.)



8.)



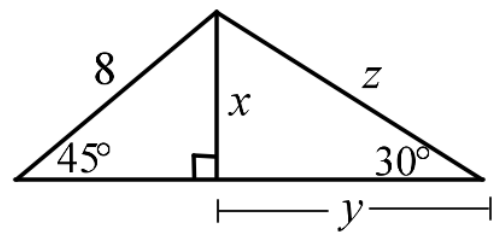
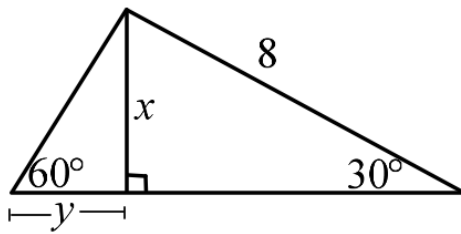
$$x = 8\sqrt{3}$$

$$x = 6$$

$$y = 8\sqrt{6}$$

$$y = 3\sqrt{3}$$

9.)



10.)

$$x = 4$$

$$x = 4\sqrt{2}$$

$$y = \frac{4\sqrt{3}}{3}$$

$$y = 4\sqrt{6}$$

$$z = 8\sqrt{2}$$

11.) 30-60-90 Triangle:

Short Leg to Hypotenuse: Multiply by 2

Short Leg to Long Leg: Multiply by $\sqrt{3}$

12.) 45-45-90 Triangle:

Leg to Hypotenuse: Multiply by $\sqrt{2}$