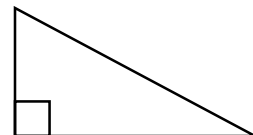


In this chapter we will be working with **radicals**. A radical is in **simplest form** when:

- ~ No perfect square other than 1 is under the radical sign
- ~ No fraction is under the radical sign
- ~ No fraction has a radical in the denominator.

$\sqrt{32}$	$\sqrt{1024}$	$3\sqrt{50}$
$\frac{4}{\sqrt{6}}$	$\frac{\sqrt{18}}{\sqrt{3}}$	$\sqrt{\frac{4}{16}}$

Pythagorean Theorem: In a _____, the square of the hypotenuse is equal to the sum of the squares of the two legs.
 _____ + _____ = _____



<p>Example 1</p>	<p>Example 2</p>
<p>Example 3</p>	<p>Example 4</p>

Common Pythagorean Triples:

1.) A right triangle has leg lengths 5 and $5\sqrt{3}$, find the length of the hypotenuse.

2.) A triangle has side lengths 3, 3, and $3\sqrt{2}$. Is the triangle a right triangle? Show work.

3.) The perimeter of a rhombus is 80. The length of one diagonal is 24. Find the length of the other diagonal.

Hint: What do you know about diagonals of a rhombus?

They _____ one another. They are _____.

Stations Activity!!

Station 1:

Station 2:

Station 3:

Station 4:

Station 5:

Station 6: