## Lesson #3.5: Pythagorean Theorem

**Learning Goal**: We are learning to use the Pythagorean Theorem to solve for missing sides in right-angled triangle.

The infamous Pythagorean Theorem is essentially an equation. As long as we have enough information, we can use it to solve.

Part One: Given the following triangles, label the sides a, b, and c, then solve for the missing side.

1.

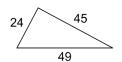


2



**Part Two:** Given the following triangles, use the Pythagorean Theorem to prove whether or not the triangle is a right-angled triangle. First, label the sides.

1



2



## MTH1W

**Part Three:** Read the question twice. Draw the situation (probably utilizing a right-angled triangle). Label the information that you know. Solve for the missing side. Write the answer to the question in the sentence.

1. A television screen is described in terms of the diagonal measure of its screen. If a TV screen is 20 inches wide and 15 inches high, what is the length of its diagonal (and hence, the size of the TV)?

## **Success Criteria:**

• I can use the Pythagorean Theorem to solve for a missing side in a triangle.