#### Pythagorean Theorem Foldable

- Print the following 2 pages front to back. Fold to create 3 columns for each page.
- This foldable is designed to be glued into an interactive notebook, so one side is left blank to allow that page to be glued in.
- On the front, you are given the space to label the 3 sides of a right triangle, write the theorem, and describe the connection with the gridded squares.

When you first open, the front fold is a space for vocabulary:

Right Angle: An angle which measures 90°

Leg: Two sides of a right triangle are called legs; they are connected by the right angle.

Hypotenuse: The longest side of a right triangle is called the hypotenuse; it is found opposite the right triangle adjacent to the legs.

Square root: A number that produces a specific quantity when multiplied by itself.

Examples 1-6 on the inside of the fold show three methods to using the Pythagorean Theorem

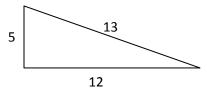
#### **Answers are:**

- 1. Yes
- 2. No

- 3. c= 17 4. c= 50
- 5. a= 12
- 6. b = 7

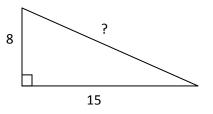
# Solve to see if it's a right triangle

Example 1



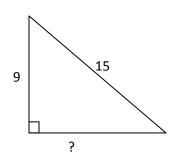
# Solve for the length of the hypotenuse

Example 3

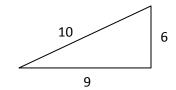


### Solve for the length of a leg

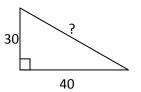
Example 5



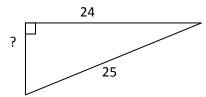
Example 2



Example 4



Example 6

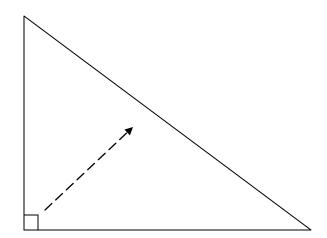


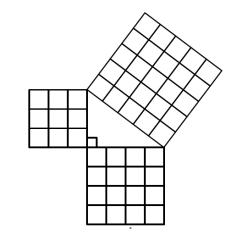
#### Vocabulary

Right Angle

Glue Here in your notebook

Pythagorean Theorem





Hypotenuse

Leg

**Square Root**