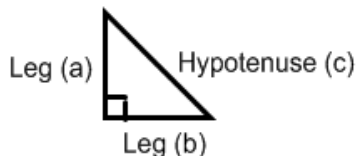


# Applications: Pythagorean Theorem Notes

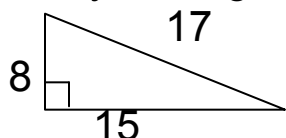
## Key Concept: Identifying Parts of Triangle:

- **Legs:** 2 sides forming right angle (a, b)
- **Hypotenuse:** side opposite the right angle; longest side of triangle (c)



## Example: Identifying Parts of Triangle

Identify the legs and hypotenuse of the following right triangles:



Legs: 8, 15 (make up right  $\perp$ )

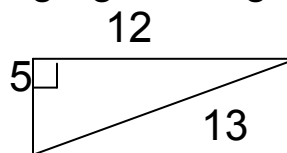
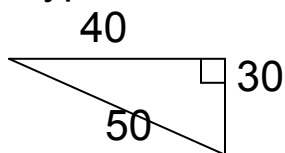
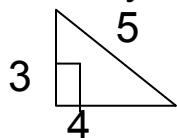
Hypotenuse: 17 (largest # & opposite right  $\perp$ )

Provided below are lengths of a right triangle. Identify the legs and hypotenuse.

- 6, 10, 8 Hypotenuse: 10 (largest), Legs: 6 and 8
- 9, 12, 15 Hypotenuse: 15 (largest), Legs: 9 and 12

## Practice: Identifying Parts of Triangle

Identify the legs and hypotenuse of the following right triangles:



Provided below are lengths of a right triangle. Identify the legs and hypotenuse.

- 12, 13, 5 Hypotenuse: \_\_\_\_\_ Legs: \_\_\_\_\_ and \_\_\_\_\_
- 9, 12, 15 Hypotenuse: \_\_\_\_\_ Legs: \_\_\_\_\_ and \_\_\_\_\_
- 25, 7, 24 Hypotenuse: \_\_\_\_\_ Legs: \_\_\_\_\_ and \_\_\_\_\_