

Reason With Right Triangle Lengths



Name: _____ Date: _____

Use the material to work through each task. Show the requested response.

Right triangles

For perpendicular legs a and b and hypotenuse c , $a^2 + b^2 = c^2$. The hypotenuse is opposite the right angle.

1. Find c if the legs are 3 and 4.

2. Find c if the legs are 5 and 12.

3. Find the missing leg if $c = 10$ and the other leg is 6.

4. Do lengths 6, 8 and 10 make a right triangle?

5. Find the distance from $(0,0)$ to $(6,8)$.

6. Why cannot the shortest side be c in a right triangle?
