

Reason With Right Triangle Lengths



Use the matching sheet ID when checking answers.

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

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

Answer: 5

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

Answer: 13

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

Answer: 8

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

Answer: yes; $36 + 64 = 100$

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

Answer: 10

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

Look for:

- Uses the relationship or correct geometric explanation.

One possible response: c^2 is the sum of the positive squares of both legs, so c exceeds each leg.

Open responses use criteria and an illustrative response. Other well-supported responses can be acceptable.