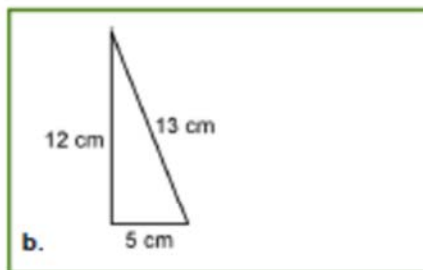
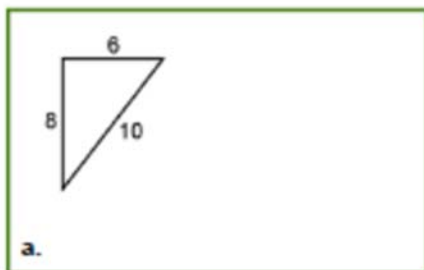


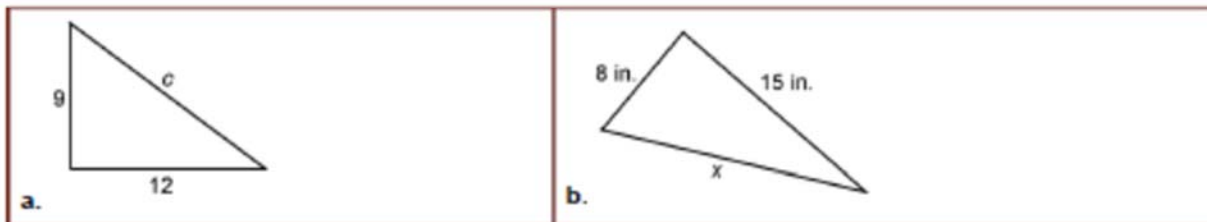
## The Pythagorean Theorem

1. These are right triangles. Write the equation given by the Pythagorean theorem, and check that it is true.



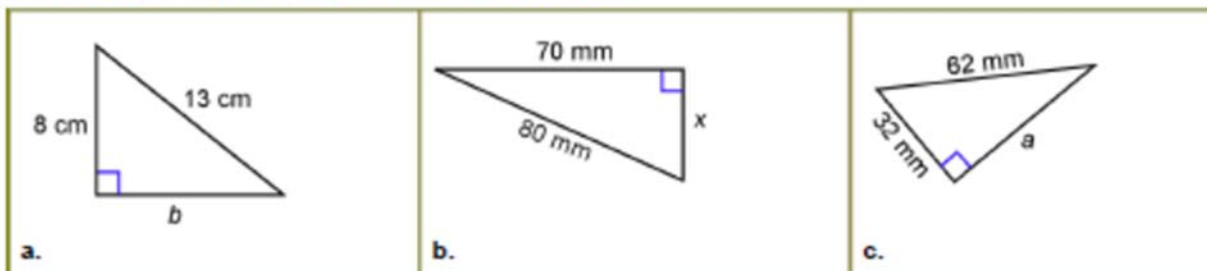
2. The three sides of a triangle are given. Use the Pythagorean theorem to check if the triangle is right.
- a. 10, 12, 15                      b. 9, 11, 5                      c. 12, 16, 20.

3. Find the length of the hypotenuse for these right triangles.

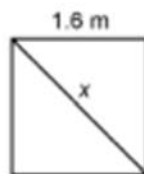


4. Find the length of the hypotenuse when the two other sides of a right triangle are given.
- a. 11 cm and 15 cm                      b. 24 in. and 30 in.                      c. 5.4 m and 3.9 m

5. Find the missing side length of these right triangles.



6. Find the diagonal of the square on the right.



7. A park is 90 m x 90 m square.  
How long is a diagonal across the park?