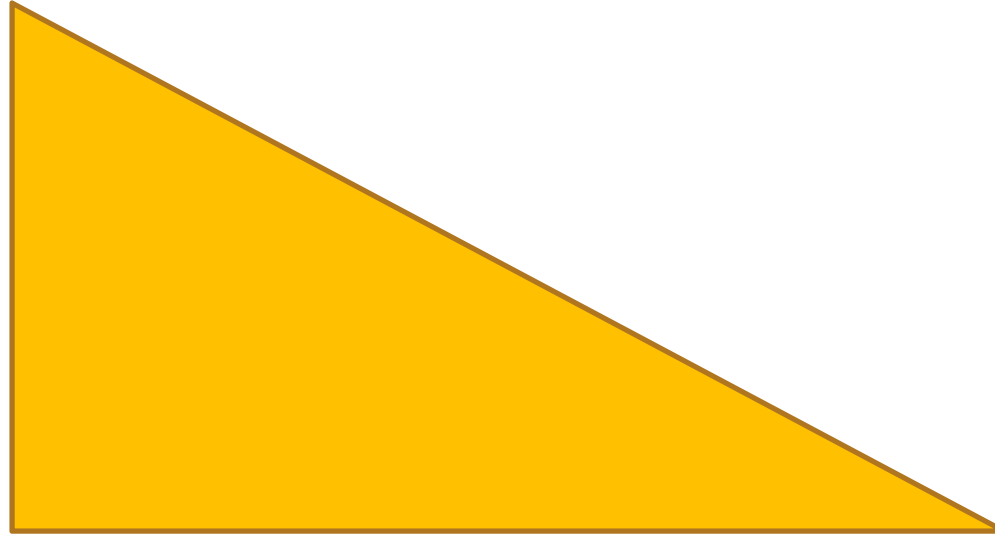


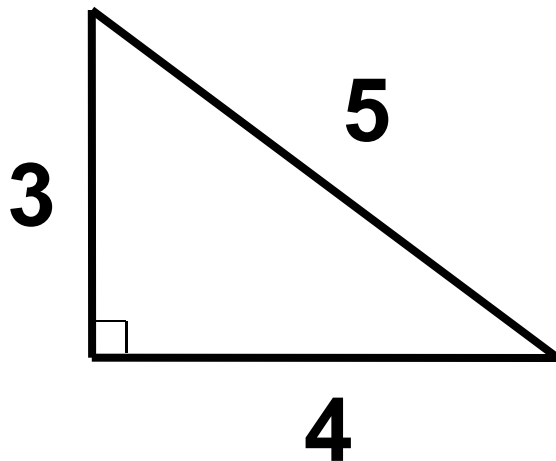
7.3

# THE PYTHAGOREAN THEOREM

# Parts of a Right Triangle

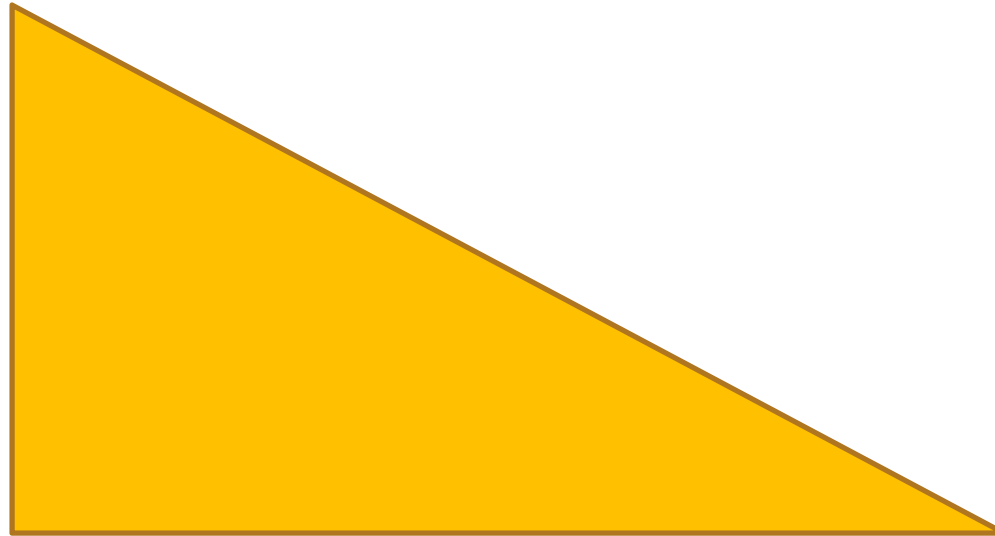


About 2,500 years ago, a Greek mathematician named Pythagorus discovered a special relationship between the sides of right triangles.



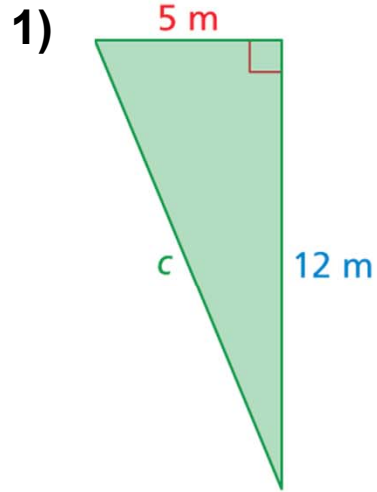
Pythagorus realized that if you have a right triangle, and you square the lengths of the two sides that make up the right angle, and add them together, you get the same number you would get by squaring the other side.

# Pythagorean Theorem



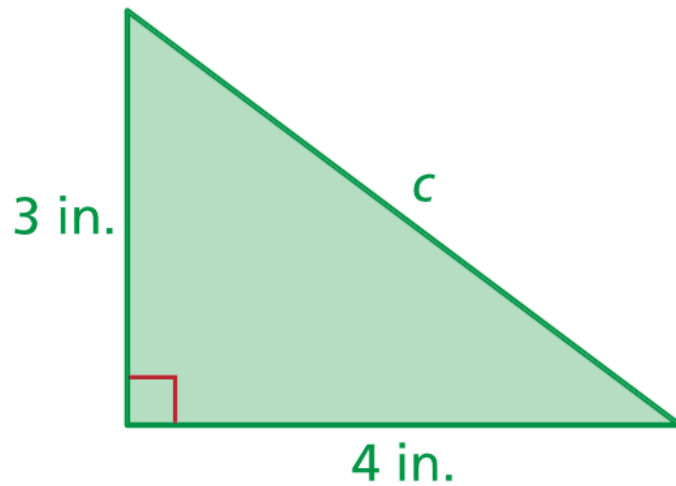
# Pythagorean Theorem

**Find the length of the hypotenuse of the triangle.**



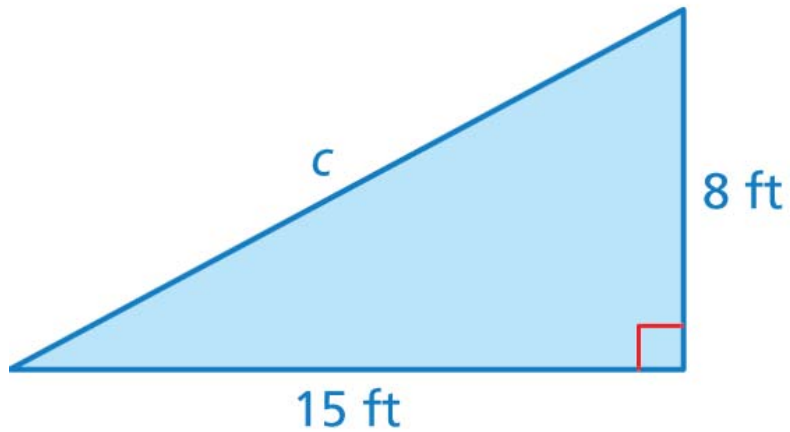
# Pythagorean Theorem

- 2) Find the length of the hypotenuse of the triangle.



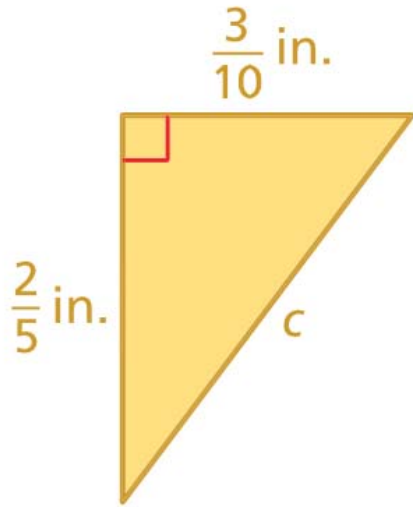
# On Your Own

3) Find the length of the hypotenuse of the triangle.



# On Your Own

4) Find the length of the hypotenuse of the triangle.

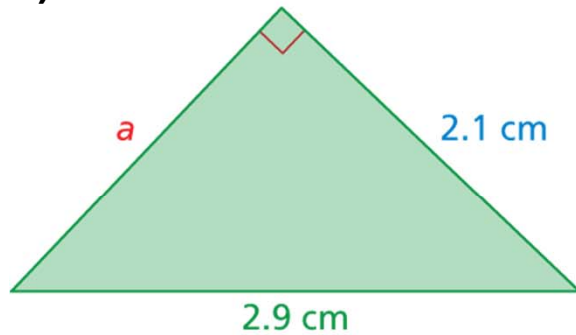




# Pythagorean Theorem

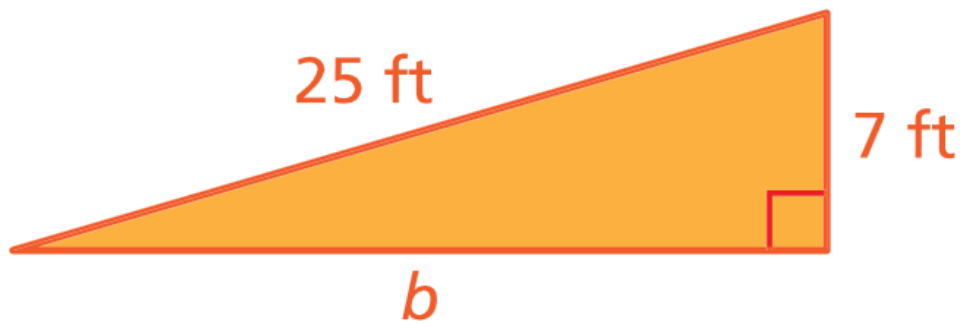
Find the missing length of the triangle.

5)



# Pythagorean Theorem

6) Find the missing length of the triangle.



- 7) You are playing capture the flag. You are 50 yards north and 20 yards east of your team's base. The other team's base is 80 yards north and 60 yards east of your base. How far are you from the other team's base?**

- 8) You and your cousin are planning to go to an amusement park. You live 36 miles south of the amusement park and 15 miles west of your cousin. How far away from the amusement park does your cousin live?