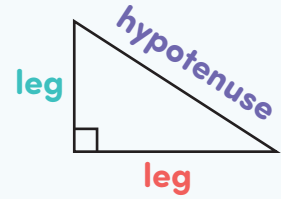


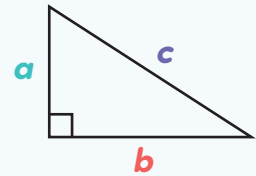
PYTHAGOREAN THEOREM: **FIND THE MISSING HYPOTENUSE**

The Pythagorean theorem relates the sides of a right triangle. It states that in a right triangle, the square of the hypotenuse is equal to the sum of the squares of the legs.

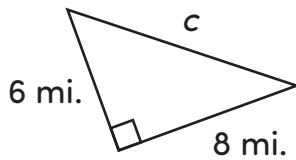


Use the following equation to show the Pythagorean theorem, where **a** and **b** represent the legs and **c** represents the hypotenuse:

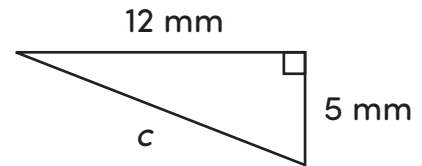
$$a^2 + b^2 = c^2$$



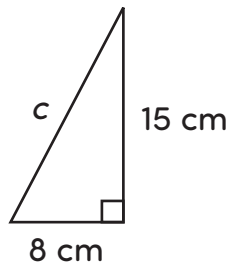
**Apply it!** Use the Pythagorean theorem to find the length of each missing hypotenuse.



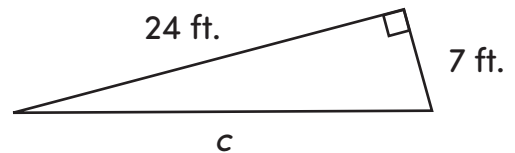
$c =$  10 mi.



$c =$  13 mm



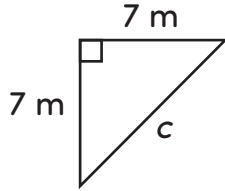
$c =$  17 cm



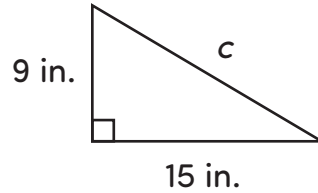
$c =$  25 ft.

PYTHAGOREAN THEOREM: **FIND THE MISSING HYPOTENUSE**

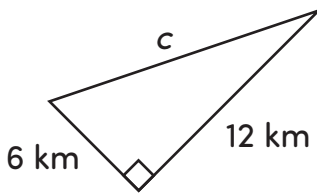
**Keep going!** Use the Pythagorean theorem to find the length of each missing hypotenuse. Round each answer to the nearest tenth.



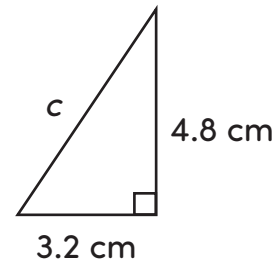
$c \approx$  9.9 m



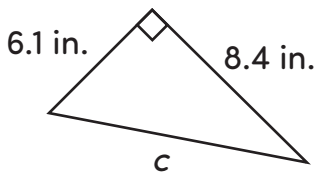
$c \approx$  17.5 in.



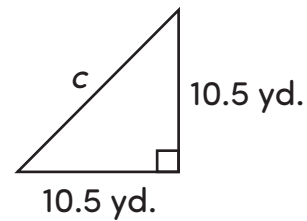
$c \approx$  13.4 km



$c \approx$  5.8 cm



$c \approx$  10.4 in.



$c \approx$  14.8 yd.