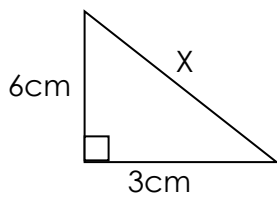


Answer the following to the nearest hundredth.

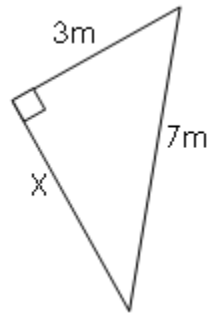
1. Dick rides his bike 68 km south and then 6 km west. How far is he from his starting point?
2. Town A is 90 miles from town B, and 18 miles from town C. Town A, B, and C are forming a right triangle at A. The state wants to build a road that connects towns B and C directly. Find the length of this road.

Find the missing side of the triangles. Leave your answer in simplest radical form.

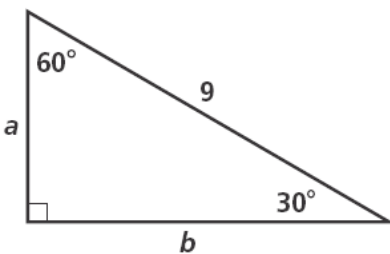
3.



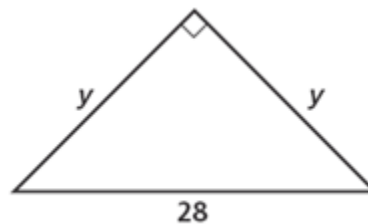
4.



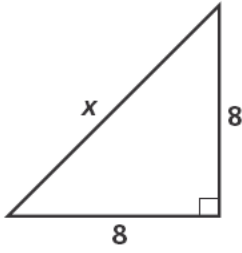
5.



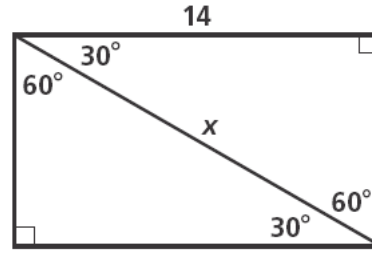
6.



7.



8.



9. Find the length to the nearest centimeter of the diagonal of a square with 30 cm on a side.

10. The hypotenuse of an isosceles right triangle is 8.4 in. Find the length of a side to the nearest tenth.

11. In a  $30^\circ - 60^\circ - 90^\circ$  triangle, the shorter leg is 6 ft long. Find the length of the other two sides to the nearest tenth.

Find the value of each variable. Leave your answers in simplest radical form.

