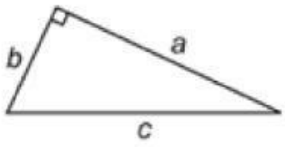
In any right triangle, the sum of the squares of the two shorter sides is equal to the square of the longer side.

Remember

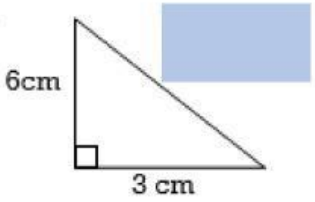
$c^2=a^2+b^2$ $a^2=c^2-b^2$



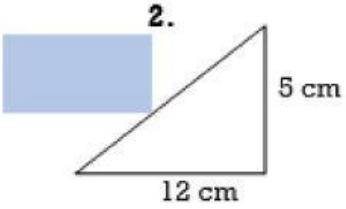
$a^2 + b^2 = c^2$

Find the length of the missing side in the following examples. Round answers to the nearest tenth, if necessary. **. Write your answer (number only) in the given box.**

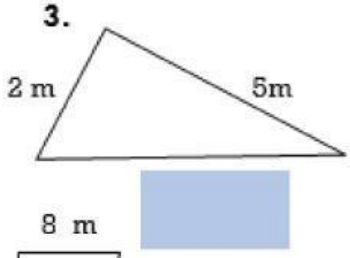
1.



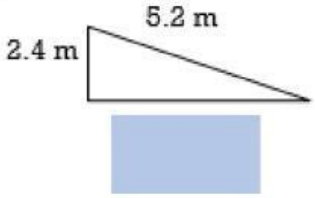
2.



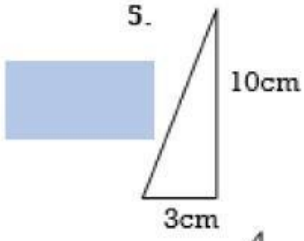
3.



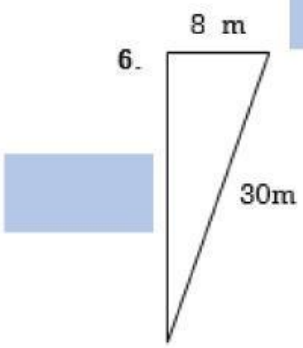
4.



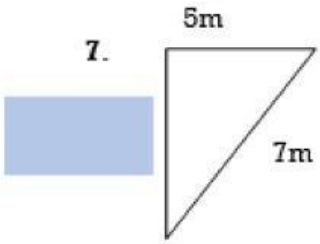
5.



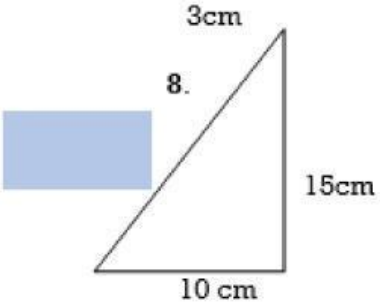
6.



7.



8.



Solve the problem and write your answer in 2 decimal places (number only) in the given box.

_____ 1. Daniel rides his bicycle 21 km west and then 18 km north. How far is he from his starting point?

_____ 2. A square is put together by two triangles. The hypotenuse is 11 cm and width of 8 cm. Find the height of the triangle.

_____ 3. Find the hypotenuse of a triangle that has a 13 cm leg and a height of 7 cm.

_____ 4. In a right-triangle shaped house, the roof is 51 feet long and the base of the house is 29 feet across. Calculate the height of the house.

_____ 5. John is trying to determine the length of the staircase he will need for a deck that is 12 feet high. He wants to start the stairs 21 feet from the deck.

_____ 6. A triangle shaped paper's height is 18 cm and width is 10 cm. Find the hypotenuse of the paper.

_____ 7. Find the hypotenuse of a triangle that has an 8 cm width and a height of 12 cm.

_____ 8. The bottom of a ladder must be placed 5 feet from a building. The ladder is 14 feet long. How far above the ground does the ladder touch the wall?

LIVEWORKSHEETS