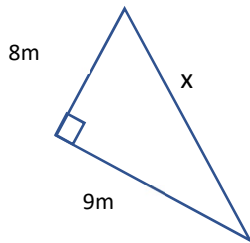


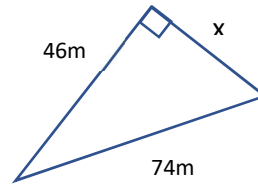
Pythagoras Practice

Show all work. Write the formula, substitute and round your answer to 2 decimal places.

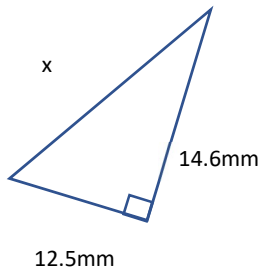
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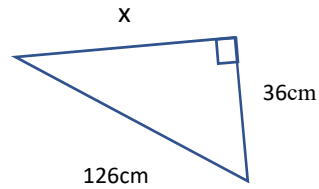
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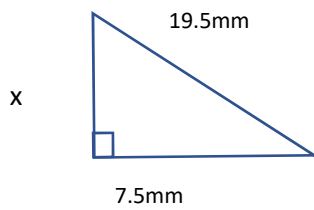
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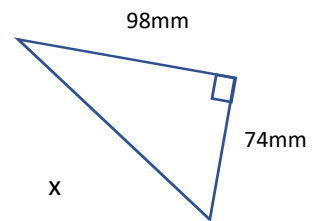
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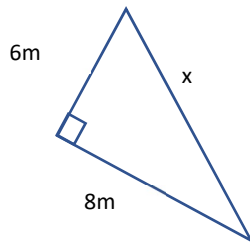
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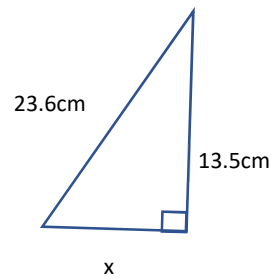
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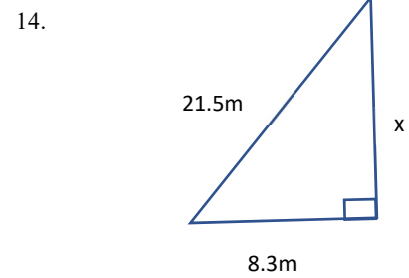
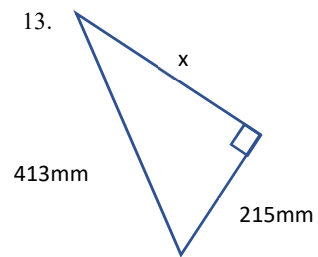
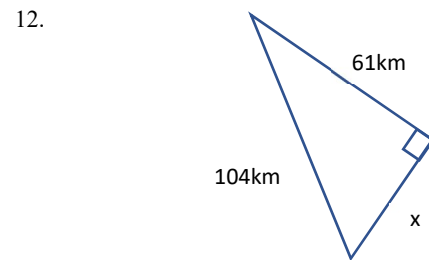
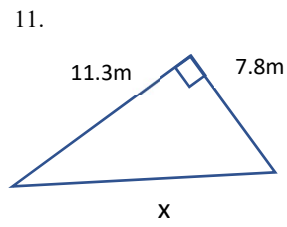
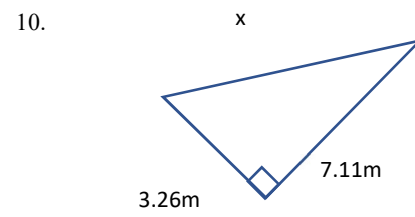
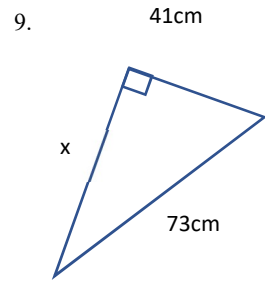


7.



8.





5. A window of a burning building is 40 feet above the ground. The base of a ladder is placed 9 feet from the building. How long must the ladder be to reach the window?

6. The bases on a baseball diamond are 90 feet apart. How far is it from home plate to second base?

7. The lawn in front of Mr. Ford's house is in the shape of a rectangle 24m long and 10m wide. How many metres shorter is Mr. Ford's walk if he walks diagonally across the lawn rather than along two sides of it?

8. Jenny is flying a kite with 100m of string let out. Kent is standing vertically below the kite and 60m from Jenny. How high is the kite flying?

9. Rectangle lake is 2.5km wide and 3.8 km long. The parking lot is located at the southwest corner of the lake and Jim's cabin is located at the northeast corner of the lake.
- In the summer, how far does Jim have to walk from his cabin to his car?
 - In the winter, Rectangle lake is frozen and Jim can walk directly across the lake from the parking lot to his cabin. How far does he have to walk in the winter?
10. A 17 m ladder is leaning against a wall of a building. The foot of the ladder is 8 m from the base of the building. How far up the wall is the top of the ladder?
11. A gate is 16m long and 12m wide. It has board to reinforce it that runs along its diagonal. How long is this board?
12. A wire is used to support a flagpole at the fairground. The wire is attached 6m from the ground and 8m from the bases of the pole. How long is the wire?

13. A pole 7.5 meters high and another pole 4.5 meters high have a wire connecting their tops. If the poles are 4 meters apart, how long is the wire?
14. A builder is making rafters for the roof of a house. The width of the house is 12m and he has to make the roof 2.5 m higher in the center than where the rafters rest on the walls of the house. Find the length of each rafter.