

LESSON

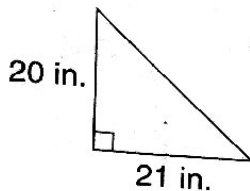
8-8

Homework and Practice

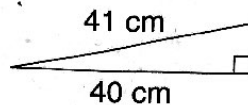
The Pythagorean Theorem

Use the Pythagorean Theorem to find each missing length.

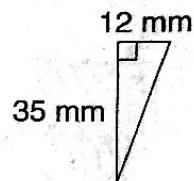
1.



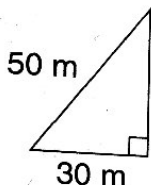
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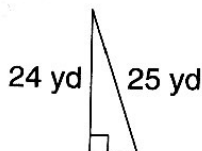
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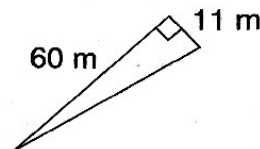
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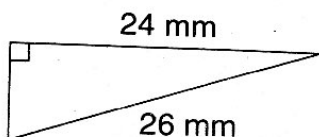
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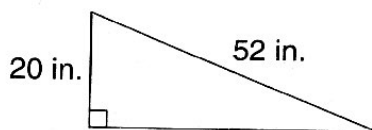
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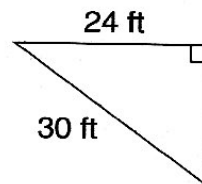
7.



8.



9.



10. An 82-foot ladder is leaning against a wall. The ladder is 18 feet from the base of the wall. How high above the ground does the ladder touch the wall?

11. A rectangle is 80 centimeters long. The length of the diagonal of the rectangle is 100 centimeters. How wide is the rectangle?

12. Jorge stands 63 feet from the base of a flagpole. The top of the flagpole's shadow falls on Jorge's shoe. The flagpole is 60 feet high. Exactly how far from the flagpole's top is Jorge standing?

13. Bernice rides a bike from her house in a straight line for 15 kilometers. She makes a 90° turn and rides for another 36 kilometers. If she rides home in a straight line, how far will she have traveled in all?