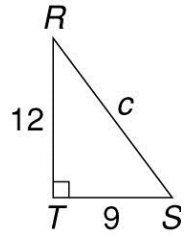
Name _____ Class _____

Pythagorean Theorem Study Guide

Solve for the unknown side in each right triangle. Round to the nearest tenth if necessary. Use Pythagorean Triples if you can.

1.



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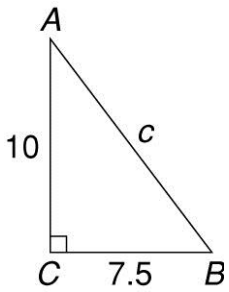

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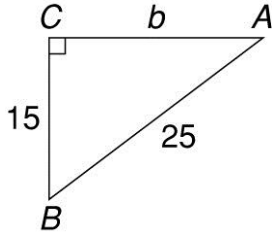

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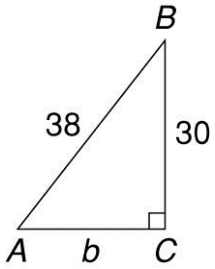

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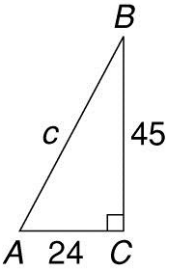

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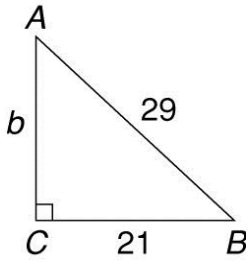

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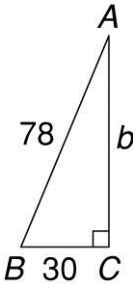

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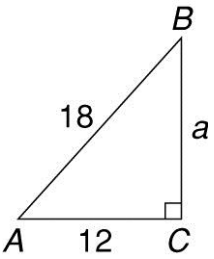

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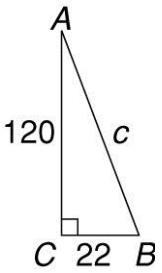

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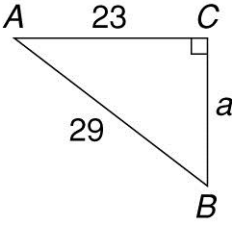

11. $a = 30, b = ?, c = 50$

12. $a = 0.5, b = ?, c = 1.3$

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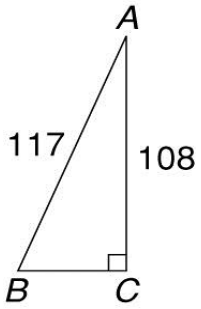
13. $a = 21, b = ?, c = 46$

14. $a = 40, b = ?, c = 65$

15. Use the Pythagorean Theorem to find the base of the triangle shown.



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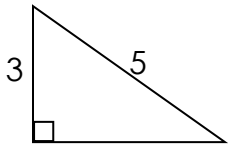

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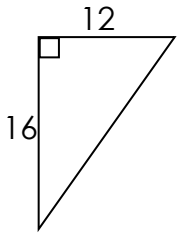

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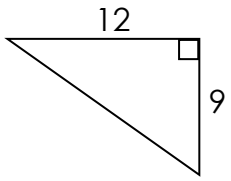

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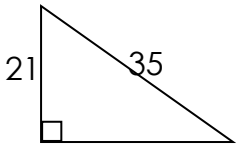

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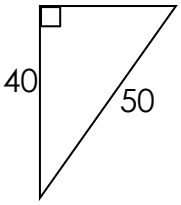

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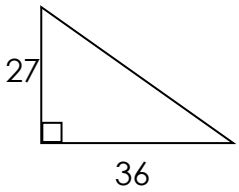

Draw a picture and solve.

22. Stephanie is planning a right triangular garden. She marked one leg that measures 24 ft and the hypotenuse that measures 25 ft. What is the length of the other leg of the garden?

23. A park is in the shape of a rectangle 8 miles long and 6 miles wide. How long is it to walk diagonally across the park?

24. A helicopter rose vertically 300 m and then flew west 400 m. How far was the helicopter from its starting point?

25. A 50-foot cable is stretched from the top of an antenna to an anchor point on the ground 15 feet from the base of the antenna. How tall is the antenna?