

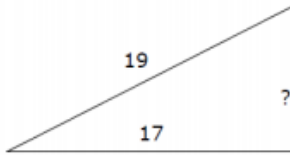
Pythagorean Theorem Worksheet

Name: _____

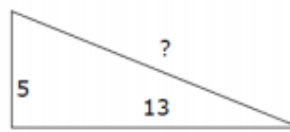
Per: _____

For each triangle, find the missing length. Write your answer in simplest radical form. No decimals.

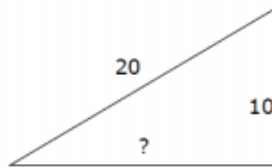
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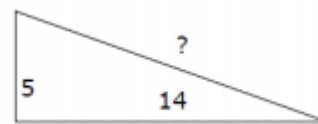
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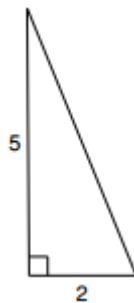
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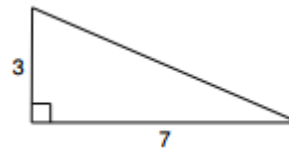
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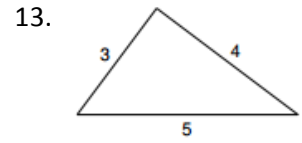
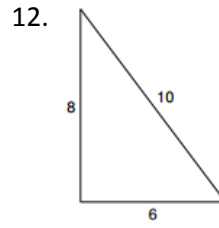
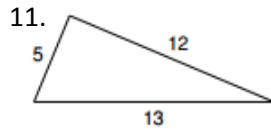
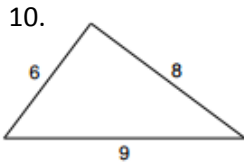
If c is the hypotenuse of the right triangle ABC , find the missing side length. Write your answer in simplest radical form. No decimals.

7. $a = 12, b = 5$

8. $a = 8, c = 10$

9. $b = 2, c = 4$

Do the following lengths form a right triangle?



For 14-6: Round your answer to 1 decimal place.

14. Ms. Green tells you that a right triangle has a hypotenuse of 13 and a leg of 5. She asks you to find the other leg of the triangle. What is your answer?

15. Two joggers run 8 miles north and then 5 miles west. What is the shortest distance they must travel to return to their starting point. Hint: Draw a picture.

16. To get from point *A* to point *B* you must avoid walking through a pond. To avoid the pond, you must walk 34 meters south and 41 meters east. How many meters would be saved if it were possible to walk through the pond. Hint: Draw a picture.

Solve and graph the inequalities.

17. $-6x \leq 18$

18. $3 + 14x > 115$

