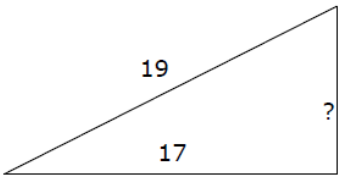
NAME:

PYTHAGOREAN THEOREM - WORKSHEET

For each triangle find the missing length. Round your answer to the nearest tenth. Then find the area and the perimeter.

1.



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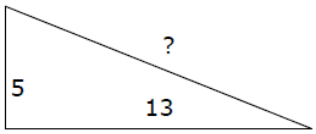

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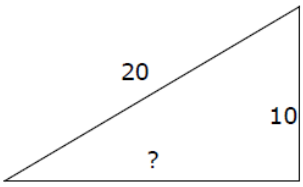

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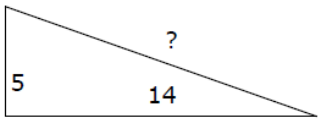

For #5-9 c is the hypotenuse of the right triangle ABC with sides a, b, c

5. a = 12 ; b = 5; c = _____

6. a = 8 ; b =_____ ; c = 10

7. a = 15 ; b =_____ ; c = 17

8. a = _____ ; b = 40 ; c =50

9. a = _____ ; b = 2 ; c = 4

10. Find a third number so that the three numbers form a right triangle:

i) 9 , 41

ii) 13 , 85

11. 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?

12. Two joggers run 8 miles north and then 5 miles west. What is the shortest distance, to the *nearest tenth* of a mile, they must travel to return to their starting point?

13. Oscar's dog house is shaped like a tent. The slanted sides are both 5 feet long and the bottom of the house is 6 feet across. What is the height of his dog house, in feet, at its tallest point?

14. 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. To the *nearest meter*, how many meters would be saved if it were possible to walk through the pond?

15. A suitcase measures 24 inches long and the diagonal is 30 inches long. How much material is needed to cover one side of the suitcase?