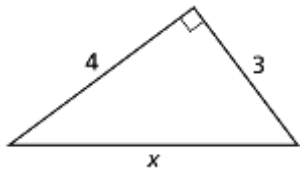
Name_____ Hour _____

HW 9.1 The Pythagorean Theorem

In Exercises 1–6, find the value of *x*. Then tell whether the side lengths form a Pythagorean triple.

1.



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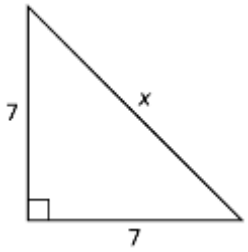

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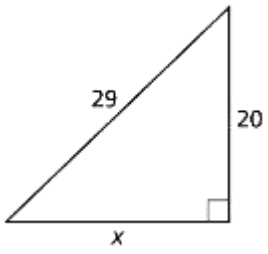
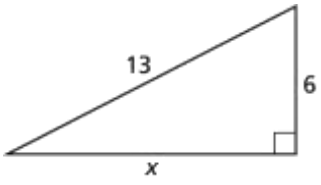


4.



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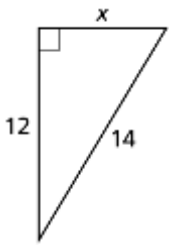
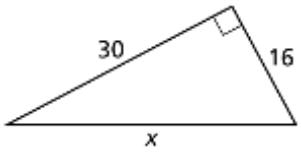
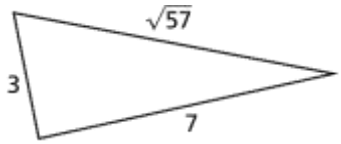


6.

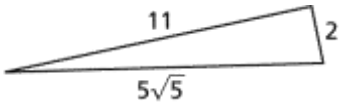


In Exercises 7 and 8, tell whether the triangle is a right triangle.

7.



8.



In Exercises 9–12, verify that the segment lengths form a triangle. Is the triangle *acute*, *right*, or *obtuse*?

9. 5, 12, and 13

10. 5, 7, and 8

11. 2, 10, and 11

12. $\sqrt{8}$, 4, and 6

13. A ski lift forms a right triangle, as shown. Use the Pythagorean Theorem (Theorem 9.1) to approximate the horizontal distance traveled by a person riding the ski lift. Round your answer to the nearest whole foot.