

Geometry

Worksheet: Converse of the Pythagorean Theorem

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_

Match the side lengths with the appropriate description.

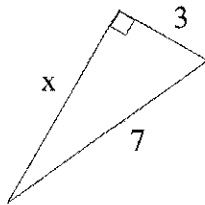
- |                     |                    |
|---------------------|--------------------|
| _____ 1. 26, 20, 17 | a. Right Triangle  |
| _____ 2. 26, 20, 14 | b. Acute Triangle  |
| _____ 3. 26, 10, 24 | c. Obtuse Triangle |
| _____ 4. 26, 10, 15 | d. Not a Triangle  |

Classify the following sides as being an acute, obtuse or right triangle.

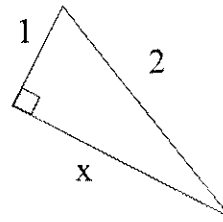
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|-----------------|---------------|----------------|
| 5. 2, 10, 11    | 6. 10, 11, 14 | 7. 4, 5, 5     |
| 8. 17, 144, 145 | 9. 8, 15, 17  | 10. 10, 36, 38 |

Find  $x$ . Leave your answer in two forms: 1) as a simplified radical 2) as a decimal rounded to nearest hundredth.

11.



12.



13. A 25-foot ladder is leaning against a wall. The base of the ladder is 6 feet from the wall. How far up the wall will the ladder reach?

14. The diagram shows the dimensions of a triangular city park. Does this city park have a right angle? Explain.

