

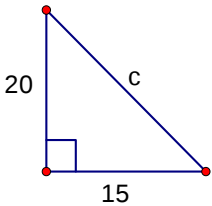
Geometry Worksheet 7.2 Worksheet
Pythagorean Theorem

Name _____
Per ____ Date _____

Write the Pythagorean Equation for each problem. Write the missing side in simplified radical form. Determine if the sides form a Pythagorean triple. If so, name the family.

1.
Equation: _____

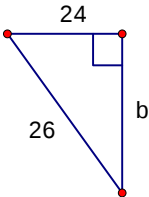
$c =$ _____
Triple? _____



Triple Family

2.
Equation: _____

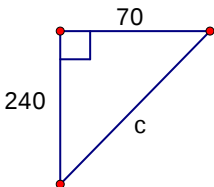
$b =$ _____
Triple? _____



Triple Family

3.
Equation: _____

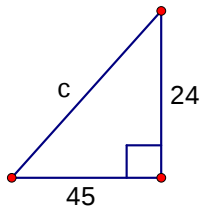
$c =$ _____
Triple? _____



Triple Family

4.
Equation: _____

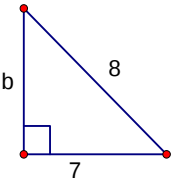
$c =$ _____
Triple? _____



Triple Family

5.
Equation: _____

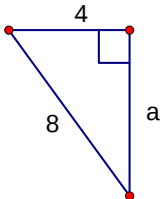
$b =$ _____
Triple? _____



Triple Family

6.
Equation: _____

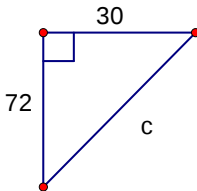
$a =$ _____
Triple? _____



Triple Family

7.
Equation: _____

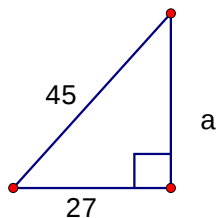
$c =$ _____
Triple? _____



Triple Family

8.
Equation: _____

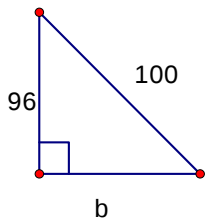
$a =$ _____
Triple? _____



Triple Family

9.
Equation:

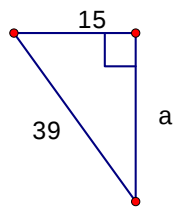
b = _____
Triple? _____



Triple Family

10.
Equation:

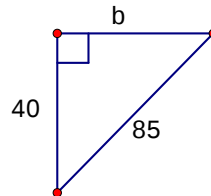
a = _____
Triple? _____



Triple Family

11.
Equation:

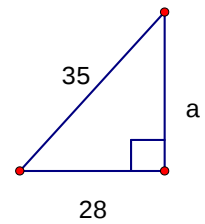
b = _____
Triple? _____



Triple Family

12.
Equation

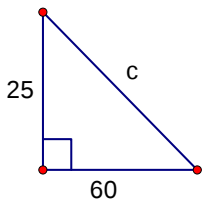
a = _____
Triple? _____



Triple Family

13.
Equation

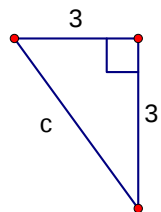
c = _____
Triple? _____



Triple Family

14.
Equation

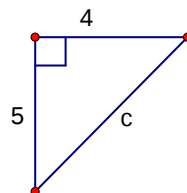
c = _____
Triple? _____



Triple Family

15.
Equation

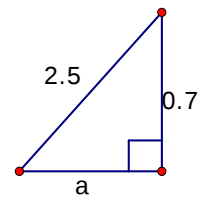
c = _____
Triple? _____



Triple Family

16.
Equation

a = _____
Triple? _____



Triple Family

Use the converse of the Pythagorean theorem to determine if each triangle is acute, right, or obtuse. Show your work to justify your answer.

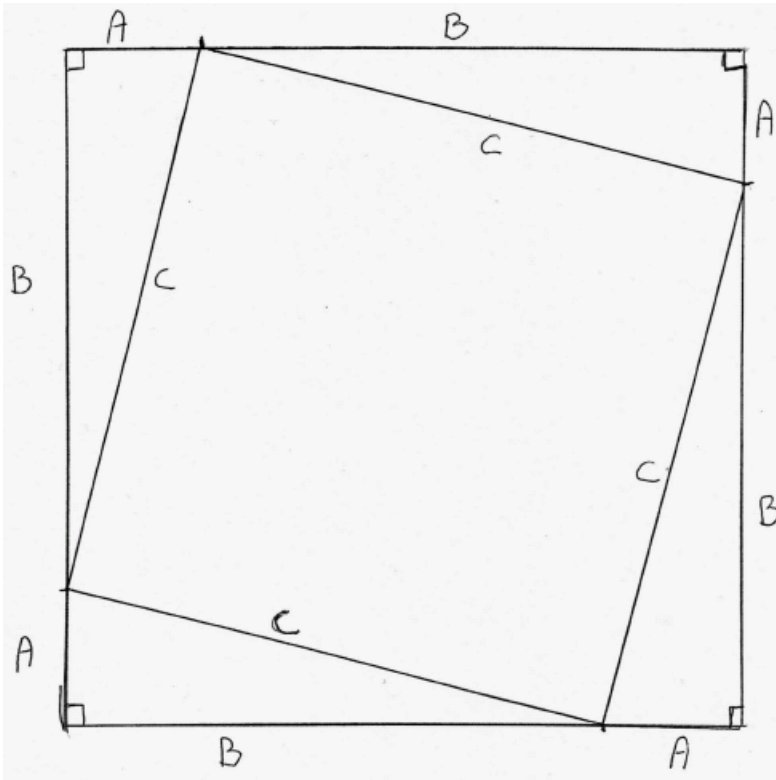
17. 11, 12, 16 -----	18. 6, 8, 9 -----	19. 45, 60, 75 -----
20. 11, 60, 61 -----	21. 6, 7, 12 -----	22. 5, 12, 13 -----

23. Multiply $(2x + 3)(x - 4)$

24. Multiply $(a + b)(a - b)$

25. Multiply $(a + b)(a - b)$

26. Multiply $(2x + 3y)(6x + y)$



1. Find the area of the entire shape.

2. a) Find the area of the four right triangles and the rhombus.

- b) How do you know that the rhombus is a square?

3. Prove the Pythagorean Theorem.