Unit 12 Study Guide

Square Roots
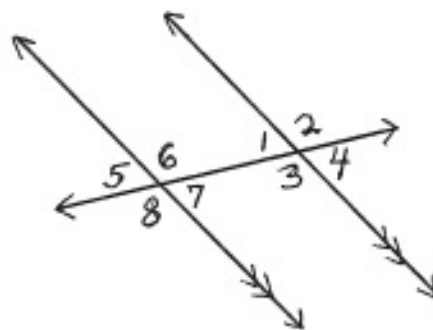*These questions are about two different squares.*

1. A square has a side length of 36 units. What is the area of the square?

2. A different square has an area of 36 units. What is the side length of this square?

Angles
Use the image at right for 3 to 5.

3.) $\angle 6$ and $\angle 3$ are _____ angles.

A. Supplementary
B. Parallel
C. Alternate Interior
D. Corresponding
E. None of these

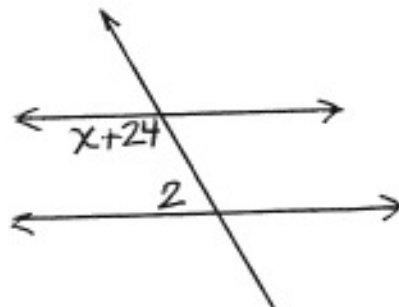4.) $\angle 5$ and $\angle 8$ are _____ angles. _____angles.

A. Corresponding
B. Vertical
C. Right
D. Supplementary
E. None of these

5.) $\angle 6$ and $\angle 8$ are

A. Corresponding
B. Vertical
C. Right
D. Supplementary
E. None of these

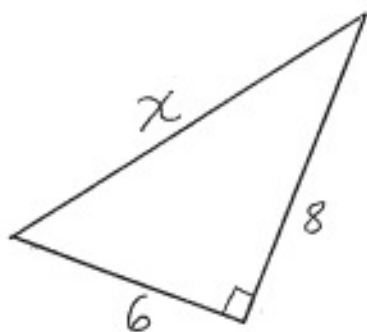6.) Find the value of x in the diagram at right.
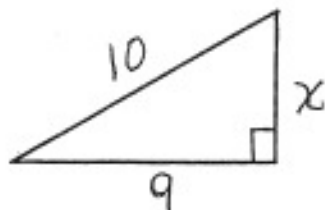
Pythagorean Theorem

7.) Determine whether the following numbers could be the sides of a right triangle. Show your work.

6, 10, 12

8.) Solve for x in the triangle.

9.) Find the leg of the right triangle. Show your work.
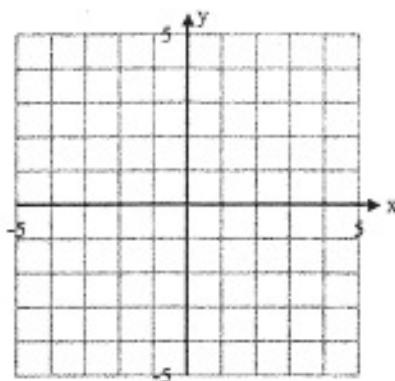

10.) Find the missing side:

Exponent Review

Simplify

11.) $2x^4(x^5)$

12.) $\frac{10x^6}{2x^3}$

Graphing Review

13.) Graph $y = -3x + 3$

Equation Review

14.) $2 - 3x - 3 = -2(3x - 1)$

15.) $\frac{x}{5} + \frac{1}{2} = 2x + 1$

System of Equations Review

16.) Where do the lines listed below intersect? Show your work.

$y = 5x - 2$
$y = 6x - 5$