# Chapter 9 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 square units. What is the side length of this square?

Angles
Use the image at right for 3 – 5.

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

A.   Supplementary
B.   Parallel
C.   Alternate Interior
D.   Corresponding
E.   None of these
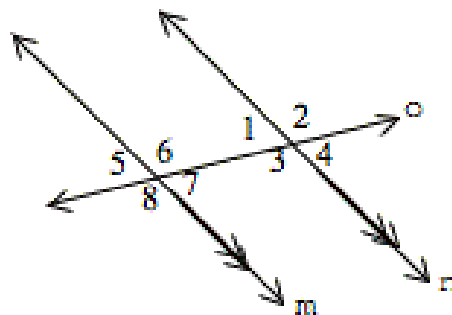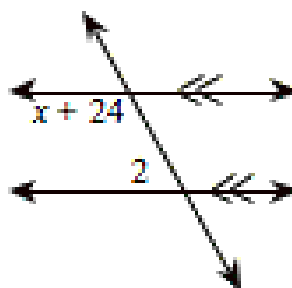
4.) $\angle 5$ and $\angle 8$ are _____ angles.

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

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

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

6.) Find the value of x in the diagram at right.
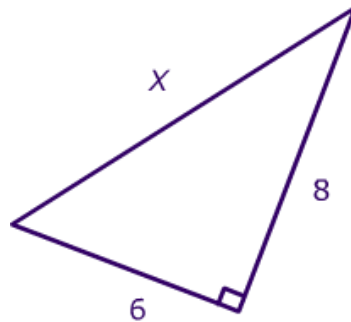
$x + 24$
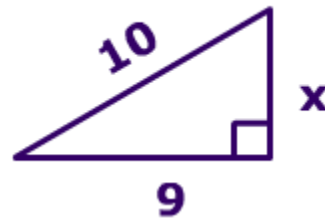
2

<u>Pythagorean Theorem</u>

7.) Determine whether the following numbers could be the sides of a right triangle. Show your work.
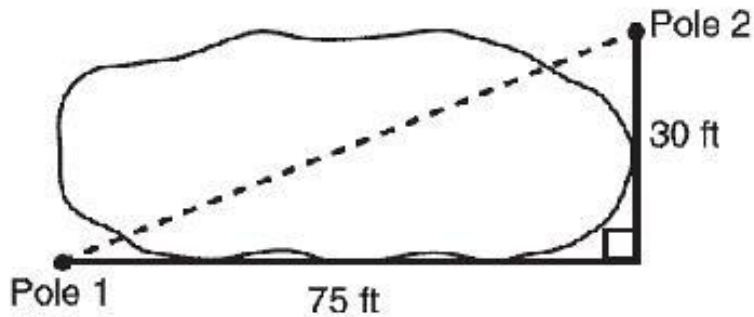
6, 10, 12

8.)   Solve for *x* in the triangle.

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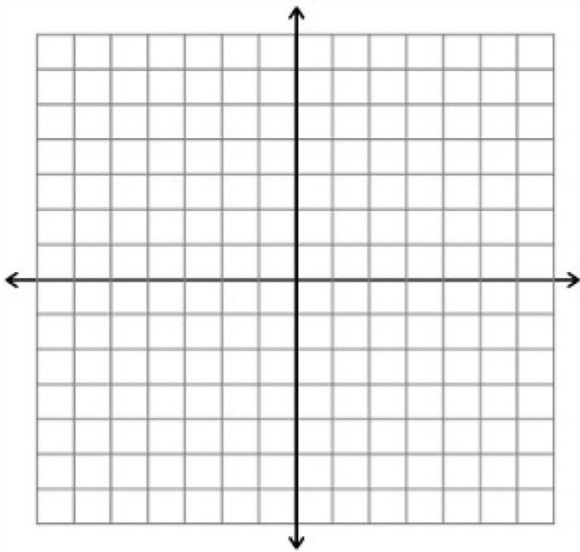

10.)   Find the missing side:

Exponent Review

Simply each.

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

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

Graphing Review

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

Equation Review

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

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

System of Equations Review

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

$Y = 5x - 2$
$Y = 6x - 5$