**Midterm Review Sheet #1**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:**

**Directions: Read each question carefully. Please show all work.**

1. Evaluate the expression  when x = 2 and y = -3. 1.\_\_\_\_\_\_\_\_\_\_\_\_

1. Solve the proportion: . 2.\_\_\_\_\_\_\_\_\_\_\_\_
2. The slope of the line that is parallel to the line that passes through (3, 4) 3.\_\_\_\_\_\_\_\_\_\_\_\_

and (-2, -6) is:

1. Solve . 4.\_\_\_\_\_\_\_\_\_\_\_\_
2. The equation of the line that is perpendicular to y = 5 and passes through 5.\_\_\_\_\_\_\_\_\_\_\_\_

the point (2, 3) is:

1. Write the equation of a line that has a slope of 4 and passes through the point (2, -1).

6.\_\_\_\_\_\_\_\_\_\_\_\_

1. Solve: 4x - (2x + 8) = -12

7.\_\_\_\_\_\_\_\_\_\_\_\_

1. Given g(x) = 3x + 12, find g(-3):

8.\_\_\_\_\_\_\_\_\_\_\_\_

1. Given f(x) = 4x2 and g(x) = x3 + 3x, find f(4) + g(-1).

9.\_\_\_\_\_\_\_\_\_\_\_\_

1. Given f(x) = 8x + 5 and g(x) = x2 + 7, find g(-2)  f(-2).

10.\_\_\_\_\_\_\_\_\_\_\_\_

1. If x = 4, then x3 - 28 = ?

11.\_\_\_\_\_\_\_\_\_\_\_\_

1. Solve the inequality: 4(x + 2) > -x, and graph the solution.

12.\_\_\_\_\_\_\_\_\_\_\_\_

**Midterm Review Sheet #2**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:**

**Directions: Read each question carefully. Please show all work.**

1. Find the slope of the line passing through the points (-3, 5) and (2, 7).

13.\_\_\_\_\_\_\_\_\_\_\_\_

1. Graph .



 14.

1. Solve |3x - 2| = 32

15.\_\_\_\_\_\_\_\_\_\_\_\_

1. Solve the following system of equations: 

16.\_\_\_\_\_\_\_\_\_\_\_\_

1. Solve the following system of equations: 

17.\_\_\_\_\_\_\_\_\_\_\_\_

1. How many solutions does the system  have?

18.\_\_\_\_\_\_\_\_\_\_\_\_

1. Write the equation of the line that passes through (3, -2) and is perpendicular to the line y = 

19.\_\_\_\_\_\_\_\_\_\_\_\_

**Midterm Review Sheet #3**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:**

**Directions: Read each question carefully. Please show all work.**



 20.

1. Graph the following inequality: 
2. Given the function *f(x) = 2x - 3* evaluate the following:
3. *f(-4)* a. \_\_\_\_\_\_\_\_\_\_\_\_\_
4. *f(0)* b. \_\_\_\_\_\_\_\_\_\_\_\_\_
5. *f* c. \_\_\_\_\_\_\_\_\_\_\_\_\_
6. How do you determine if a graph represents a function?
7. **Explain** how to graph the line *y = -3x + 2*