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

Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 8

Cumulative Review #3.9

**Show work for all questions for full credit**

**& write your answers on the lines provided!!!**

(*If you feel no work is needed you must explain your reasoning.)*

1. Which ordered pair is *not* a solution of the equation y = 3x − 3?

A. (−1, −1) B. (0, −3) C. (1, 0) D. (2, 3)

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Simplify (2m + 3)2.

A. 4m2 + 9 B. 4m2 + 12m + 9

C. 2m2 + 12m + 9 D. 2m2 + 6m + 9

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. The solution of an equation with two variables, x and y, is

A. the set of all x values that make y = 0

B. the set of all y values that make x = 0

C. the set of all ordered pairs, (x,y), that make the equation true

D. the set of all ordered pairs, (x,y), where the graph of the equation crosses

the y

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Kendal bought x boxes of cookies to bring to a party. Each box contains 12 cookies. She decides to keep two boxes for herself. She brings 60 cookies to the party. Which equation can be used to find the number of boxes, x, Kendal bought?

A. 2x – 12 = 60 B. 12x – 2 = 60

C. 12x – 24 = 60 D. 24 – 12x = 60

4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Solve the following system of equation

*2x + 3y = 0*

*x + 2y = -1*

5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Simplify the expression 3(x2 – 1) (2x + 3)

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

7. Sue and Kathy were doing their algebra homework. They were asked to write the equation of the line that passes through the points (-3, 4) and (6, 1). Sue wrote and Kathy wrote . Justify why both students are correct.

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

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Evaluate (2x − 3z)2 - xz when x = −2 and z = −6.

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

9. Solve and check the following equation:

25 + 10(12 – x) = 5(2x – 7)

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

10. If a line contains the points in the table, write the equation of the line.

|  |  |
| --- | --- |
| X | Y |
| -8 | -42 |
| -3 | -17 |
| 0 | -2 |
| 6 | 28 |

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