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

**Unit 5 Review Handout**

**Directions: Show ALL OF YOUR WORK!! Circle your answers.**

**Solve using substitution.**

1.) y = 6x – 11 2.) -3x – 3y = 3

 -2x – 3y = -7 y = -5x – 17

**Solve using elimination.**

3.) -4x + 9y = 9 4.) -4x – 2y = 14

 x – 3y = -6 -10x + 7y = -25

**Solve using any method.**

5.) -14 = -20y – 7x 6.) 3 + 2x – y = 0

 10y + 4 = 2x -3 – 7y = 10x

**Write the system and solve.**

7.) You have a jar of pennies and quarters. You want to choose 15 coins that are worth exactly $2.31. Write a system of equations to model the situation. How many pennies and quarters do you choose?

8.) In a chemistry lab, you have two vinegars. One is 5% acetic acid and one is 6.5% acetic acid. You want to make 200 mL of vinegar with 6% acetic acid. How many milliliters of each vinegar do you need to mix together?

**Solve the system of inequalities by graphing.**

9.) y ≤ -x – 2 10.) 4x + y < 2

 y ≥ -5x + 2 y > -2



**Solve equation by graphing.**

11.) $\left|-x+4\right|$ = $\left|2x-2\right|$

****

**ANSWERS:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.) ( 2, 1 ) | 2.) (-4,3) | 3.) ( 9, 5) | 4.) (-1,-5) | 5.) ( 2, 0) |
| 6.) (-1, 1) | 7.) quarters =9 pennies = 6 | 8.) 6.5% = 66.7 5%= 133.3 | 11.) x = 2 and x =-2 |