Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_\_

**5.2B Solving Systems of Equation by Substitution Method\_Classwork**

*Objective: Solve a system of equations using the substitution method. CCSS: 8.EE.8b*

*HW: (5.2B) P. 212 #7 – 14, 18, 19*

\*\*\*\*\*\* Warm up on the back\*\*\*\*\*\*

**EXAMPLES:** Tell which equation you would choose to solve for one of the variables when solving the system by substitution. Explain your reasoning.

|  |  |
| --- | --- |
| 1. -5x + y = -3   3x – 8y = 24 | 1. -7x – 2y = -13   x – 2y = 11 |

**EXAMPLES:** Solve the system of equations by substituting

|  |  |
| --- | --- |
| 1. -5x + y = -2   -3x + 6y = -12  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ | 1. -3x – 8y = 20   19 = -5x + y  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. -3x + 3y = 4   -x + y = 3  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ | 1. x + 3y = 3   2x + 6y = 6  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ |

**PRACTICE PROBLEMS**

|  |
| --- |
| 1. -5x + y = -7   -3x – 2y = -12  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 2x – 3y = -1   1 = x - y  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 10x – 5y = 10   2x – y = -9  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 2y – 16x = -2   y = 8x – 1  Solution: \_\_\_\_\_\_\_\_\_\_\_\_ |

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Warm up (5.2B). **Use your 5.0 and 5.1B Notes for assistance.**

Without solving, match the systems fo linear equations on the left with the number of solutions on the right (NO SOLUTION, ONE SOLUTION, INFINITELY MANY SOLUTIONS)

|  |  |  |
| --- | --- | --- |
| y = 6x + 1 |  |  |
| y = 8x - 8 |  |  |
|  |  |  |
| y = x - 4 |  |  |
| y - x = - 4 |  |  |
|  |  |  |
| y = 2x – 5 |  |  |
| y = 2x + 9 |  |  |