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

**5.3A Solving Systems of Linear Equations by Elimination Method\_Classwork**

*Objective: solve systems of two linear equations in two variables algebraically by using the elimination method. CCSS: 8.EE.8b*

*HW: (5.3A) p. 221 #4 - 13 – do not forget to* ***√*** *your answers on p. A26*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Do the following problems   |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  |   Do you see a relationship between each problem? |

In systems of equations where coefficient (the number in front of the variable) of x or y terms are *additive inverses*, you can eliminate one variable and solve the remaining variable. In order to do the elimination method, the systems must be in standard form (Ax + By = C). Make sure to rewrite equations in standard form before using the elimination method.

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| --- | --- | --- | --- | --- |
| Look at each system and identify which variable you would eliminate first.   |  |  | | --- | --- | | 1)  Eliminate the \_\_\_\_variable because \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 2)  Eliminate the \_\_\_\_variable because \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | 3)  Eliminate the \_\_\_\_variable because \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 4)  Eliminate the \_\_\_\_variable because \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

**EXAMPLE PROBLEMS** – Solve the system of linear equations by elimination

|  |  |
| --- | --- |
| 1)  Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 2)  Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**PRACTICE PROBLEMS**

|  |
| --- |
| 1)  Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 2)  Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 3)  Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**WARM-UP**

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