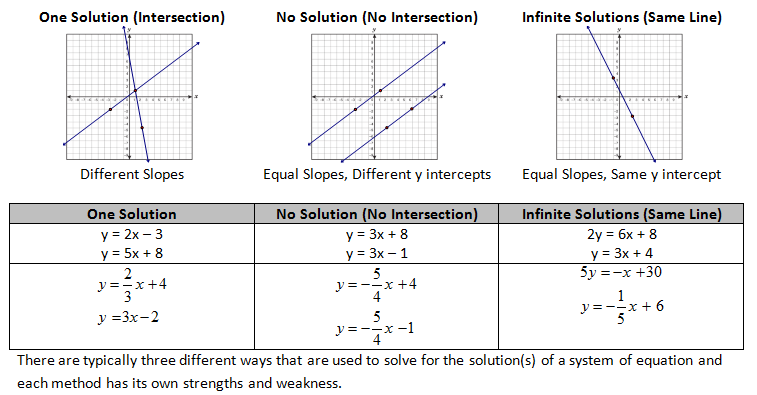
Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_\_

**5.1A Solving Systems of Linear Equations by Graphing\_Classwork**

*Objective: write and solve systems of linear equations by graphing. CC.SS.8.EE.8a/b/c*

*HW: textbook – 5.1A pg 206 #8-16 ALL*

Special Case Equations When Graphing:



|  |  |
| --- | --- |
| **EXAMPLE 1:**    Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **EXAMPLE 2:**    Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **EXAMPLE 3:**    Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **EXAMPLE 4:**    Solution: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| When doing business, you have ***COSTS*** (how much it costs for you to run your business) and ***REVENUE*** (money you collect from your customers). When your costs equal your revenues, you ***BREAK EVEN*.** You have made zero dollars in profit, but your costs are covered. Break Even equation is C = R or R = C. | |
| **EXAMPLE 5:**  The cost c (in dollars) for fuel and maintenance of a moped rental company is given by the equation c = 60x + 1200, where x is the number of days to rent the moped. It costs $80 per day.   1. Write an equation for the revenue R in terms of the number of days. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. How many days does it take to break even? | |

**PRACTICE PROBLEMS**

|  |  |
| --- | --- |
| Solution: \_\_\_\_\_\_\_\_\_\_\_ | Solution: \_\_\_\_\_\_\_\_\_\_\_ |
| 1. The cost c (in dollars) to run a company that provides skydiving is given by the equation c = 60x + 6000, where x is the number of jumps from the airplane. It costs $100 per jump.      1. Write an equation for the revenue R in terms of the number of jumps. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. How many jumps does it take to break even? | |

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| **WARM-UP** (REVIEW FROM CHAPTER 4)   |  |  |  | | --- | --- | --- | | 1. Graph y = 5 | 1. Graph x = -2 | 1. Write 3x + 2y = 8 in slope-intercept form (y = mx + b) 2. Write y = -6x - 1 in standard form (Ax + By = C) | |

