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

**4.2A The Slope Formula\_Classwork**

*Objective: find slopes of lines by using two points*

*HW: 4.2A pg 154\_#1, 3, #7-18 ALL*

***EXAMPLE 1: Given the slope (m) and the y-intercept (b), write a linear function for each problem.***

|  |  |  |
| --- | --- | --- |
| 1. m = 3; b = -3 | 1. m = ; b = 2 | 1. m = 0; b = 4 |
| 1. m = ; b = 0 | 1. m = -1; b = 6 | 1. m = -5; b = -2 |

***EXAMPLE 2: Use the FORMULA to find the slope. Use two points to find the slope.***

|  |  |  |
| --- | --- | --- |
| 1. (-3, 5) and (2, 18) | 1. (3, -3) and (3, -1) | 1. (4, -3) and (2, -3) |
| 1. (5, -1) and (9, -4) | 1. ( 5, 2) and (1, 0) | 1. (0, 0) and (3, -1) |
| 1. (9, 2) and (8, -7) | 1. (-4, 4) and (-7, 2) | 1. (1, 0) and (3, -4) |

***WARM-UP***

Find the slope and y-intercept for each problem.

|  |  |  |
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| 1.    Slope: y-intercept: | 2.    Slope: y-intercept: | 3.    Slope: y-intercept: |
| 4.    Slope: y-intercept: | 5.    Slope: y-intercept: | 6.    Slope: y-intercept: |