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

**4.2C Slopes of Parallel and Perpendicular Lines\_Classwork**

* FOR NEXT YEAR: Include the y-intercept of all problems

For each graph, identify the slopes and y-intercepts of each line. Then write the equation in slope-intercept form (y = mx + b). What do you notice about the slopes and y-intercepts of each set? Is there a pattern?

|  |  |
| --- | --- |
| 1. **Line 2****Line 1** | 2. (DO IT WITH THE STUDENTS) $$\frac{15}{9}$$**Line 4****Line 3** |
| 3.  | 4. **Line 6****Line 5** |
| 5. What do you notice about the slopes and y-intercepts of each set? Is there are a pattern? Two lines are parallel … |

|  |  |
| --- | --- |
| 6. (DO IT WITH THE STUDENTS) $$\frac{16}{3}$$$$-\frac{17}{4}$$**Line 8****Line 7** | 7. **Line 10****Line 9** |
| 8. **Line 12****Line 11** | 9.   none |
| 10. What do you notice about the slopes and y-intercepts of each set? Is there are a pattern? Two lines are perpendicular…. |

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

**4.2C Slopes of Parallel and Perpendicular Lines\_Classwork**

LESSON LAUNCH

Find the negative reciprocal:

 a)  ----🡪 \_\_\_\_

 

 b) 2 ----🡪 \_\_\_\_

 c) -1 ----🡪 \_\_\_\_

|  |
| --- |
| READ EXAMPLE 1 (P. 156) AND EXAMPLE 2 (P. 157).Below are the Extra Example Videos1. 2.  |
| **Friday CW: (4.2 ext.) p. 156 #1 – 12 ALL (do assignment in BIM)** #6 #12Image result for graph Image result for graph |

**SUMMARY**

Identify whether the given lines are *parallel*, *perpendicular* or *neither*. Justify your answer.

|  |  |  |
| --- | --- | --- |
| Equations | *Parallel*, *Perpendicular* or *Neither* | Justification |
| $y= \frac{2}{3}x+3$, $ $$$y= -\frac{3}{2}x-5$$ |  |  |
| $y=4, $ y$= -2$ |  |  |
| $x= -1,$ $y=7$ |  |  |
| $y=6x-4,$ $ y=6x+2$ |  |  |
| $x=7,$ $ x= \frac{1}{2}$ |  |  |