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

**6.2A NOTES – Slope of a Line**

*Objective: Derive slope using graph and table (CCSS: 8.EE.6)*

 WATCH “Slope Dude” <https://www.youtube.com/watch?v=avS6C6_kvXM>

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| --- | --- | --- | --- |
| **POSITIVE SLOPE**m = positive valuethe line rises from left to right | **NEGATIVE SLOPE**m = negative valuethe line falls from left to right. | **SLOPE OF ZERO** m = zero valuethe line is horizontal | **UNDEFINED SLOPE**m = no valuethe line is vertical |

 |

**GRAPHS**

|  |  |
| --- | --- |
| 1. a) Describe the slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Then find the slope of the line. m =    | 2. a) Describe the slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Then find the slope of the line. m =    |
| 3. a) Describe the slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Then find the slope of the line. m =   | 4. a) Describe the slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Then find the slope of the line. m =   |

**TABLES**

|  |  |  |
| --- | --- | --- |
| 5. Use the table to find the slope (constant rate of change)

|  |  |
| --- | --- |
|  | a) Describe the slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_b) Then find the slope of the line. m =  |

 |
| 6. Use the table to find the slope (constant rate of change)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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|  |  |
| --- | --- |
| **x** | **y** |
| -2 | 4 |
| -1 | 4 |
| 0 | 4 |
| 1 | 4 |

 | a) Describe the slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_b) Then find the slope of the line. m =  |

 |
| 7. Use the table to find the slope (constant rate of change)

|  |  |
| --- | --- |
|  | a) Describe the slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_b) Then find the slope of the line. m =  |

 |

Use EQUATION to find the slope. Circle the slope and write it out. y = mx + b

|  |  |
| --- | --- |
| 1. $y=3x+5$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_1. $y=-5x-7$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_1. $y=-x$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_1. $y=2x+5$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_ | 1. $y=x$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_1. $y=-3x$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_1. $y=\frac{1}{5}x-2$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_1. $y=-\frac{1}{4}x-1$

m = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_ |

**CLASSWORK.** Complete the following problems below.

Use $\frac{rise}{run}$ to find the slope of the line.

|  |  |  |
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| 7. **m =**   | 8. **m =**   | 9. **m =**    |
| 10. **m =**   | 21.**m =**   | 22. **m =**   |
| 23. **m =**   | 24.**m =**   | 33. Do the points A(-2,-1), B (1, 5), and C(4, 11) lies on the same line? Explain.  |