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

**6.2B Slope of a Line\_Classwork**

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

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

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

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

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

Use to find the slope of the line.

|  |  |  |
| --- | --- | --- |
| 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. |