Module 4 – Linear Functions and Their Graphs

Lesson 3 – Slope of a Line

Homework 1

Name

Answer each section.

Fill in the blanks.

1. The steepness of a line is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a line.
2. The change in y of a slope is also called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ while the change in x is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the variable that is commonly used as the slope of a line.
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Determine if the line slopes *upwards*, *downward*, *horizontally*, or *vertically*.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Arrange the following equations into slope-intercept form *(y = mx + b)* and

identify their slope and y-intercept.

|  |  |  |  |
| --- | --- | --- | --- |
| Equation | Slope-Intercept Form | Slope | Y-Intercept |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Find the slope of the line that goes through each pair of points. **Show all work.**

1. (-3, 5) and (4, 7) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. (5, -6) and (1, -6) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. (2, -5) and (2, -1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. (1, -6) and (-4, 4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_