Name _____

Activity 1.8

Chapter 1: Function Sense

Learning Objective

1. Write a linear equation in the slope-intercept form, giving the initial value and the average rate of change.
2. Write a linear equation given two points, one of which is the vertical intercept.
3. Use the point-slope form to write a linear equation given two points, neither of which is the vertical intercept.
4. Compare slopes of parallel lines.

Practice Exercises

Find the equation of the line. The final equation should be solved for the output y:

1. Slope = –
vertical intercept = 13

2. Slope = -8
vertical intercept = 7

3. Containing the points (-5, 4) and (0, 8)

4. Containing the points (12, -6) and (0,3)

5. Slope = -2
contains the point (-4, 5)

6. Slope = 0.5
contains the point (6, -2)

7. Containing the points (-9, -6) and (-7, 4)

8. Containing the points (10, 6) and (5, -24)

9. Parallel to the line $y = -5x + 3$
passing through the point (4, 7)

10. Parallel to the line $y = .07x + 15$
passing through the point (10, 8)

11. Slope = **–**
vertical intercept = 3

12. Containing the points (-7, 9) and (0, 5)

13. Slope = -9
contains the point (-8, -3)

14. Containing the points (11, 19) and (0, -25)

Concept Connections

1. State the definition of parallel lines.

2. For a linear function, what is true of the average rate of change. Why?