

Lesson 6.1 – 6.2 Homework

Graphing Lines

Algebra 1

Rearrange each equation to get the y by itself. Then list the slope of the line and its y -intercept.

1. $5x + 2y = 20$
2. $3x - y = 6$
3. $-8x + 2y = 14$

On a sheet of graph paper, make a separate graph for each of the previous equations. Graph neatly and accurately using the slope and intercept.

4. Graph Problem 1
5. Graph Problem 2
6. Graph Problem 3

Calculate the x - and y -intercepts of each line. [Remember: For x -intercept, $y = 0$; for y -intercept, $x = 0$.]

7. $2x - 3y = 6$
8. $8x + 4y = 16$

On the same sheet of graph paper, make a graph for each of the previous problems. Graph the x - and y -intercepts, then draw a neat, straight line through both points.

9. Graph Problem 7
10. Graph Problem 8

Calculate the slope between the two points. You may use graph paper to plot the points and count the squares.

$$\text{Slope} = \frac{\text{Rise } \updownarrow}{\text{Run } \rightarrow} \quad \text{or} \quad \text{Slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

11. (3, 6) and (1, 9)
12. (-4, -6) and (-3, -2)
13. (-5, 2) and (1, 2)
14. (4, 7) and (4, -9)

15. What is the slope of a horizontal line?

16. What is the slope of a vertical line?