1. Find the equation of the line that passes through the following points:

$$(-1, -5)$$
 and  $(9, -5)$ 

- 2. Find the equation of the line passing through the given point with the indicated slope. Point (6, -8), zero slope
- 3. Find the equation of the line passing through the given point with the indicated slope. Point (7, -8), undefined slope
- 4. Find the equation of the line that passing through the given point with the indicated slope.

Origin, zero slope

- 5. The slope of a line is  $\frac{11}{14}$ . What is the slope of any line parallel to this line?
- 6. Is the system parallel, perpendicular, or neither?

$$y = 5x$$

$$2x = y - 3x + 8$$

- 7. The slope of a line is  $\frac{13}{14}$ . What is the slope of any line perpendicular to this line?
- 8. Is the system parallel, perpendicular, or neither?

$$y + 2x = -4$$

$$y = 2(x+8)$$

- 9. Find the equation of the line fitting the information given. Parallel to -3x 4y = -8 and passing through the origin
- 10. Find the equation of the line containing the point (8, 1) and perpendicular to the line y = -7x + 6.

- 11. Find the equation of the line containing the point (2, 13) and perpendicular to the line 9x + 27y = -8.
- 12. Find the equation of the line containing the point (2, -8) and parallel to the line 6x + y = -12.
- 13. Find the equation of the line fitting the information given. Perpendicular to 4x + 3y = -6 and passing through (-2, 1)

## **Answer Key**

- 1. y = -5
- 2. y = -8
- 3. x = 7
- 4. y = 0
- 5.  $\frac{11}{14}$
- 6. parallel
- 7.  $-\frac{14}{13}$
- 8. neither
- 9.  $y = -\frac{3}{4}x$
- 10.  $y = \frac{1}{7}x \frac{1}{7}$
- 11. y = 3x + 7
- 12. y = -6x + 4
- 13.  $y = \frac{3}{4}x + \frac{5}{2}$