Line and System Quiz Review

Find the rate of change.

1.

Water Level Loss	
Week	Water Loss (cm)
1	1.5
2	3
3	4.5
4	6

2.

HANDLING FEES
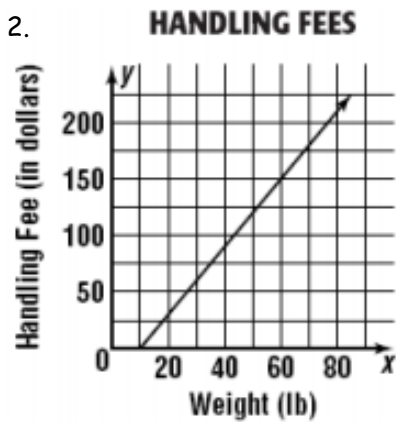
Find the slope of the line that passes through the following points.

3. (0, -2) and (-5, -4)

4. (1, -2) and (1, -4)

5. (-2, 2) and (3, -1)

Write an equation of the line that goes through the following points.

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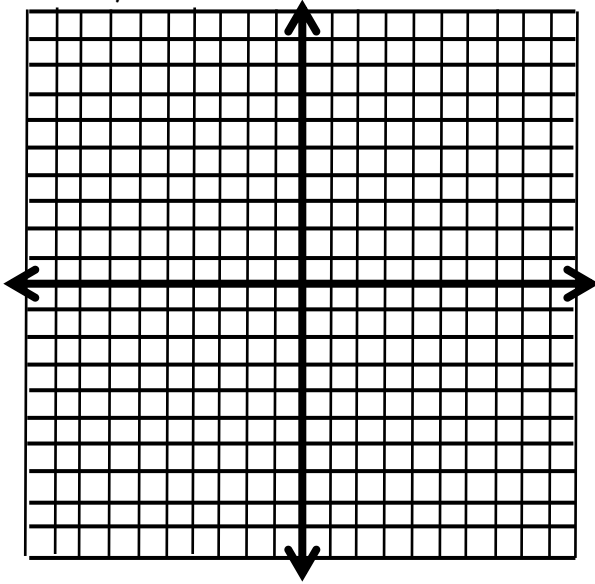
7. (-4, 5) and (-3, 2)

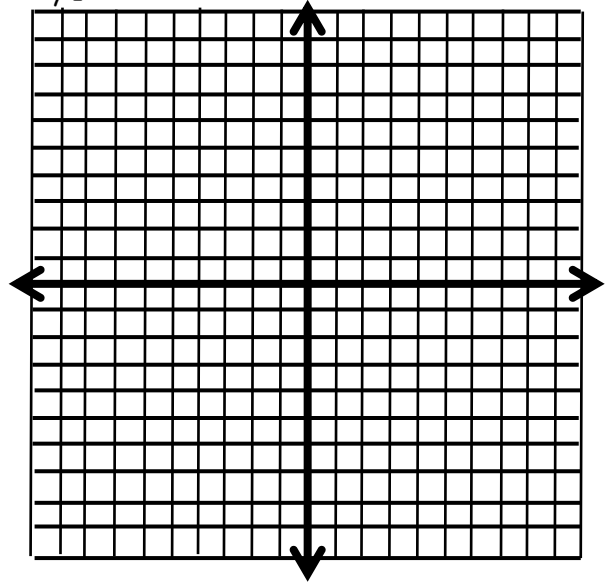8. (0, 3) and (-5, -1)

Solve the system of inequalities by graphing.

9. $y \geq -\frac{2}{3}x - 4$
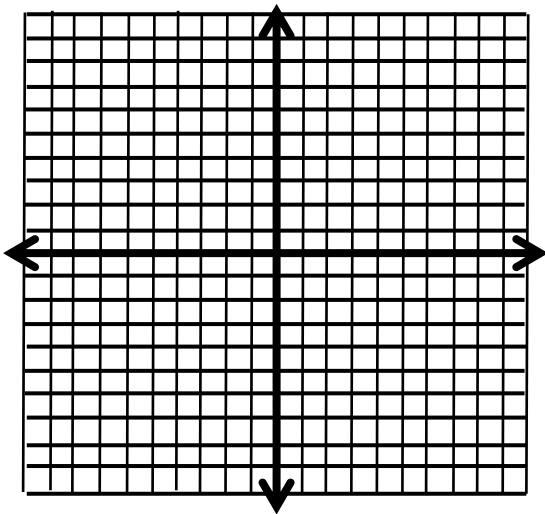
   $y > 3x - 4$

10. $x \geq 2$
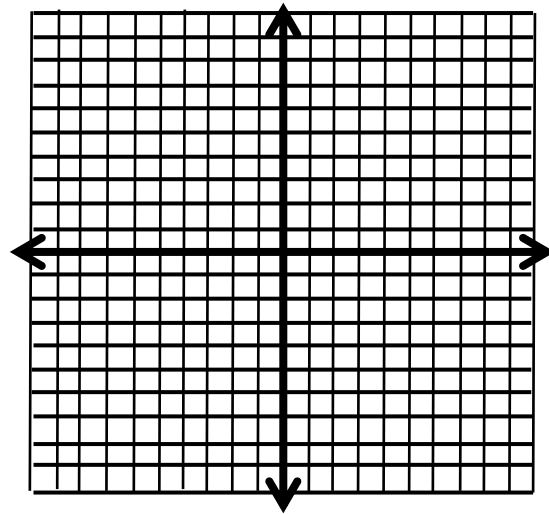
   $y \leq -x + 4$

Solve the system of equations by graphing.

11. $y = 3x - 9$

   $y = -\frac{3}{4}x + 6$

12. $y = \frac{2}{3}x + 2$

   $y = 4$

Solve the system of equations by substitution.

13. $-4x + y = -9$

   $y = x - 3$

14. $-8x + 5y = 17$

   $y = 6x + 21$

15. $2x + y = 20$

   $-3x + 4y = 14$

16. $-8x + y = -6$

   $24x - 3y = 5$

Solve the system of equations by elimination.

17. $-7x + 4y = 24$

   $4x - 4y = 0$

18. $4x - y = 20$

   $-2x - 2y = 10$

19. $6x - 12y = 24$

   $-x - 6y = 4$

20. $-y - x = 2$

   $-4y - 11x = 36$