

- *Review for Chapter 6A is due on the day of the test.*
- *Review will not be graded unless answers are written on separate paper.*
- *In order to be eligible to retest, this review must be complete, accurate, and turned in.*

1. Tell whether the ordered pair $(5, -3)$ is a solution of the system
$$\begin{cases} -3x + 2y = -21 \\ -x - y = -2 \end{cases}.$$

2. Tell whether the ordered pair $(2, 1)$ is a solution of the system
$$\begin{cases} -x - 3y = -5 \\ -x - 2y = -4 \end{cases}.$$

3. Tell whether the ordered pair $(-4, -3)$ is a solution of the system
$$\begin{cases} 2x - 3y = 1 \\ x - y = -3 \end{cases}.$$

4. Tell whether the ordered pair $(4, 5)$ is a solution of the system
$$\begin{cases} 2x - 2y = -2 \\ x + 2y = 15 \end{cases}.$$

Solve the system by graphing.

5.
$$\begin{cases} -3x - y = -10 \\ 4x - 4y = 8 \end{cases}$$

6.
$$\begin{cases} y = -x - 9 \\ 3x - y = -11 \end{cases}$$

7.
$$\begin{cases} -2x + y + 1 = 0 \\ 4x - 2y = -2 \end{cases}$$

8.
$$\begin{cases} 3x + 4y = -36 \\ -2x + 4y = -16 \end{cases}$$

9.
$$\begin{cases} 2x - y - 4 = 0 \\ y = 2x - 4 \end{cases}$$

10. Tell whether $(8, 5)$ is a solution of $y > x + 7$.

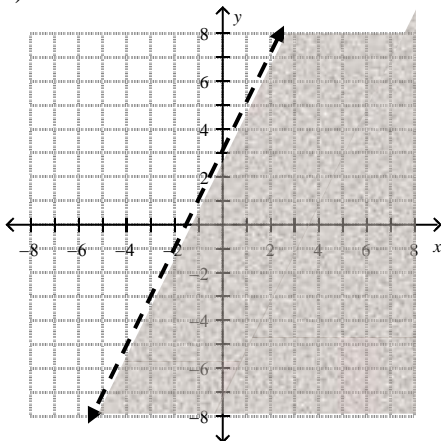
11. Tell whether $(5, 6)$ is a solution of $y < 5x + 8$.

12. Graph the solutions of the linear inequality $-8x + 2y > -6$.

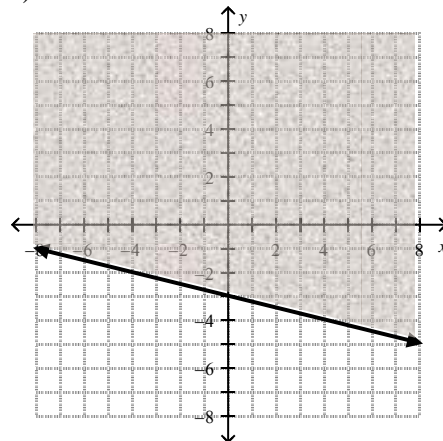
13. Tony has \$18 to buy apples and bananas for a fruit salad. Apples cost \$2 per pound and bananas cost \$1 per pound. Write and graph an inequality to describe the situation. Then give two possible combinations of pounds of apples and bananas that Tony can buy.

14. Write an inequality to represent the graph.

a)







b)



Graph the inequalities:

15. $0 > 9 + 6x - 9y$. 16. $y \geq 3$ 17. $y \leq x + 5$ 18. $x < 4$
19. A rental car agency charges a flat fee of \$32.00 plus \$3.00 per day to rent a certain car. Another agency charges a fee of \$30.50 plus \$3.25 per day to rent the same car. **Use your graphing calculator to find the solution.**
- Write a system of equations to represent the cost c for renting a car at each agency for d days.
 - Using a graphing calculator, find the number of days for which the costs are the same. Round your answer to the nearest whole day.
20. Parallel lines have the same _____.
21. Describe the slopes of 2 perpendicular lines. Give an example.
22. Graph and give the equation of the linear parent function.
23. Parallel lines have how many solutions?
24. Lines that have the same slope and same y-intercept have how many solutions?
25. Classification of lines:
- Describe a system of lines that is classified as consistent and independent
 - Describe a system of lines that is classified as consistent and dependent
 - Describe a system of lines that is classified as inconsistent

Spiral Exam: Chapters 1-5 calculator allowed.

- Remember the various ways to represent a function.
- If you are given several equations and a table of (x, y) ordered pairs, you can always work backwards – plug the equations into the graphing calculator and look at the generated table to see if it matches the given table. Enter the equation: $y =$ Look at the table: 2nd Graph
- If $f(x) = 3x - 4$, if the independent variable is the set $\{-2, 0, 3, 5\}$, what is the corresponding set of values for the dependent variable?
- Direct variation:  varies directly with  means  = k  --- $y = kx$ or $\frac{y}{x} = k$