

Sections 3.1 through 3.2 Test Review

Name: _____

3-1A Solving Systems with Graphing

- 1) Determine if $(-3, -1)$ is a solution for the system of equations.

$$-2x - 3y = 9$$

$$4x + 6y = -18$$

- 2) Determine if $(3, 8)$ is a solution for the system of equations.

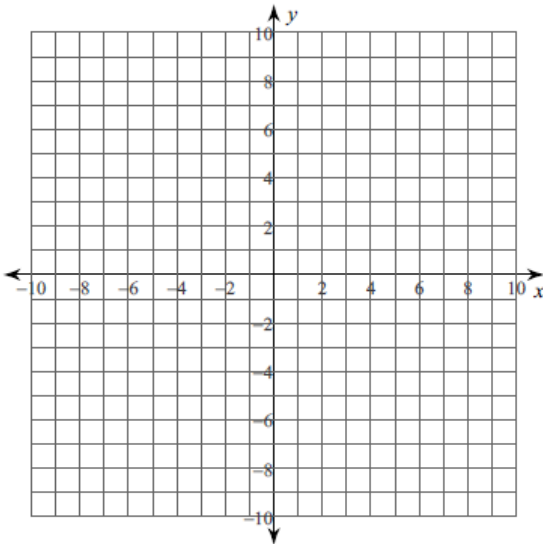
$$9x - 2y = 11$$

$$5x + 4y = 13$$

- 3) Use a graph to solve the system .

$$y = 2x - 10$$

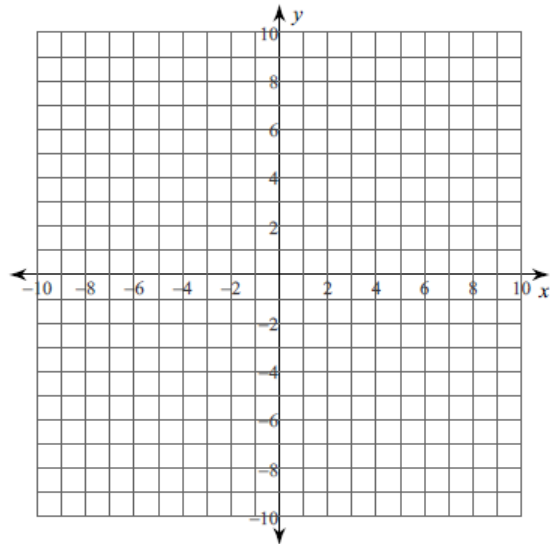
$$y = -4x + 8$$



- 4) Use a graph to solve the system .

$$y = -x - 2$$

$$4x + 2y = -6$$



- 5) Determine the number of solutions of

$$y + 4x = 12$$

$$3y = 8 - 12x$$

- 6) Determine the number of solutions of

$$2x + 5y = 10$$

$$-4x - 10y = -20$$

3-1B Solving Systems with Substitution

7) Use substitution to solve the system.

$$y = -x - 4$$

$$-9x - 4y = 31$$

8) Use substitution to solve the system.

$$2x + y = -2$$

$$x - 3y = -22$$

3-1C Solving Systems using Elimination

9) Solve the system by elimination.

$$4x - 3y = 29$$

$$4x + 3y = 35$$

10) Solve the system by elimination.

$$-35x + 40y = 55$$

$$7x - 8y = -11$$

11) Solve the system by any method.

$$4x + 3y = 2$$

$$4x - 2y = 12$$

12) Solve the system by any method.

$$8x - 5y = -60$$

$$6x + 3y = -18$$

3-1D Systems Applications

13) A youth group went on a trip to an amusement park, travelling in two vans. The number of people in each van and the total cost of admission are shown in the table. Find the adult price and student price of admission.

VAN	ADULTS	STUDENTS	TOTAL COST
A	2	5	\$77
B	2	7	\$95

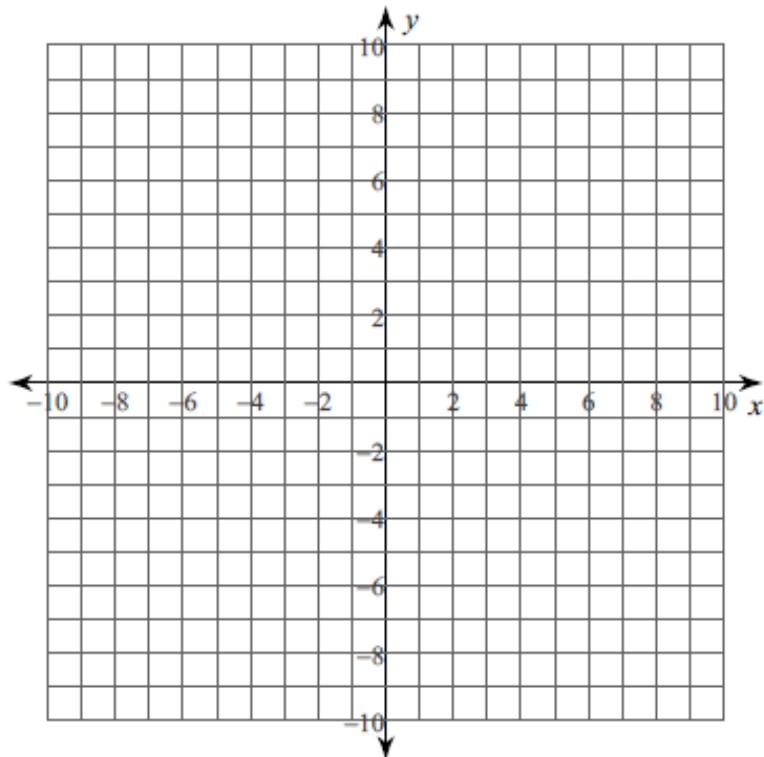
14) Kate is thinking of two numbers, the sum of the two numbers is 75. Their difference is 9. What are the two numbers?

3-2 Systems of Inequalities

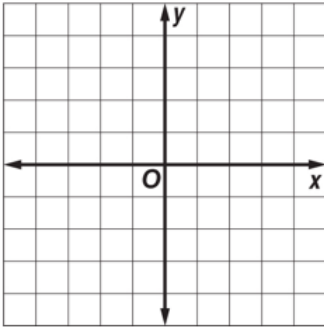
Solve the system of Inequalities by Graphing:

15. $y \geq 2x - 1$

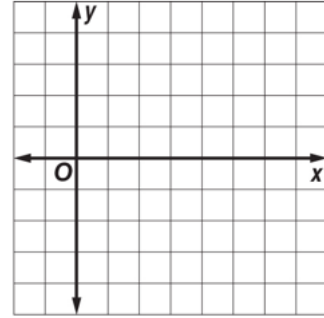
$y < -3x + 4$



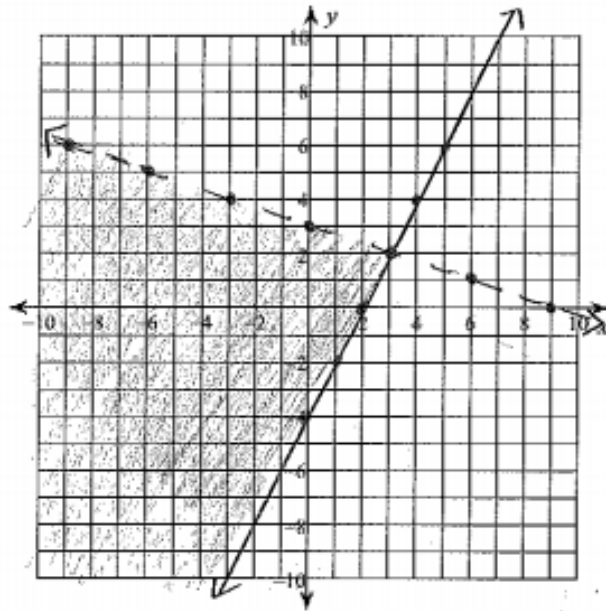
16. $x - y \leq 4$
 $2x + y < 4$



17. $y < 3$
 $x + 2y < 12$



18. Write the system of inequalities shown



19. Write the systems of inequalities shown.

