

Name: _____

Period: _____

Sections 3.1 through 3.2 Quiz Review

3-1A Solving Systemes by Graphing

- 1) Determine if (2, 7) is a solution for the system of equations.

$$4x - y = 1$$

$$5x + 2y = 24$$

- 2) Determine if (3, 5) is a solution for the system of equations.

$$4x + 5y = -41$$

$$3y - 5x = 5$$

- 3) Use a graph to solve the system .

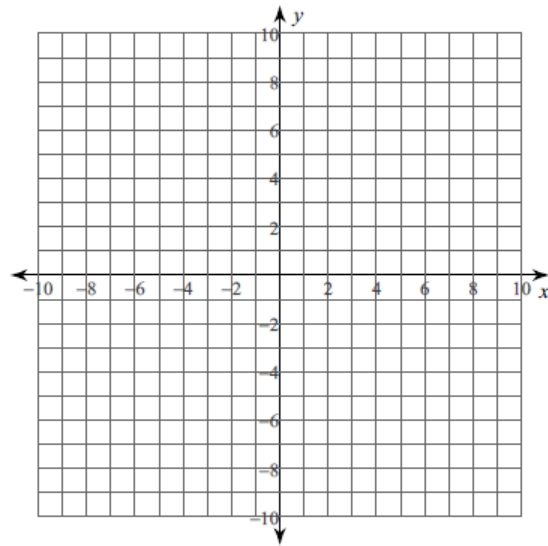
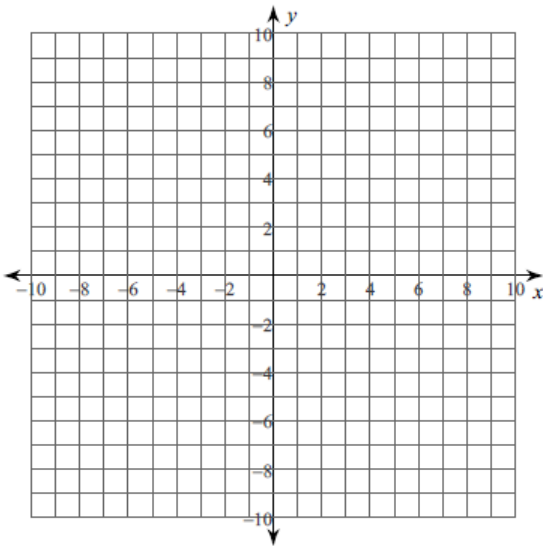
$$y = 2x - 4$$

$$2x + y = 8$$

- 4) Use a graph to solve the system .

$$y = -3x + 9$$

$$-x + y = -3$$



- 5) Determine the number of solutions of

$$-4x + 5y = -17$$

$$-4x - 2y = 15$$

- 6) Determine the number of solutions of

$$5x + 3y = 52$$

$$15x + 9y = 54$$

3-1B Solving Systems Using Substitution

7) Use substitution to solve the system.

$$y = -2x + 7$$

$$5x - 3y = 23$$

8) Use substitution to solve the system.

$$x - 7y = 11$$

$$5x + 4y = -23$$

3-1C Solving Systems Using Elimination

9) Solve the system by elimination.

$$4x - 3y = -22$$

$$2x + 3y = 16$$

10) Solve the system by elimination.

$$6x - 5y = -8$$

$$4x - 5y = -12$$

3-1 Solving Systems of Equations

11) Solve the system by any method.

$$-6x - y = 27$$

$$3x + 8y = 9$$

12) Solve the system by any method.

$$y = -3x + 6$$

$$2y + 36 = 10x$$

3-1D Applications of Systems

13) Elena rented a raft from River Rafter's Inc. She paid \$100 to rent the raft and \$25 an hour for a guide. Martin rented a raft from Oscar's Outdoor Shop. He paid \$50 to rent the raft and \$35 per hour for a guide. For what number of hours will both rafting companies charge the same amount? What amount will they charge?

14) At a park there are 38 people playing tennis. Some are playing doubles, and some are playing singles. There are 13 matches in progress. A doubles match requires 4 players, and a singles match requires 2 players.

a) Write a system of equations that represents the number of singles and doubles matches going on.

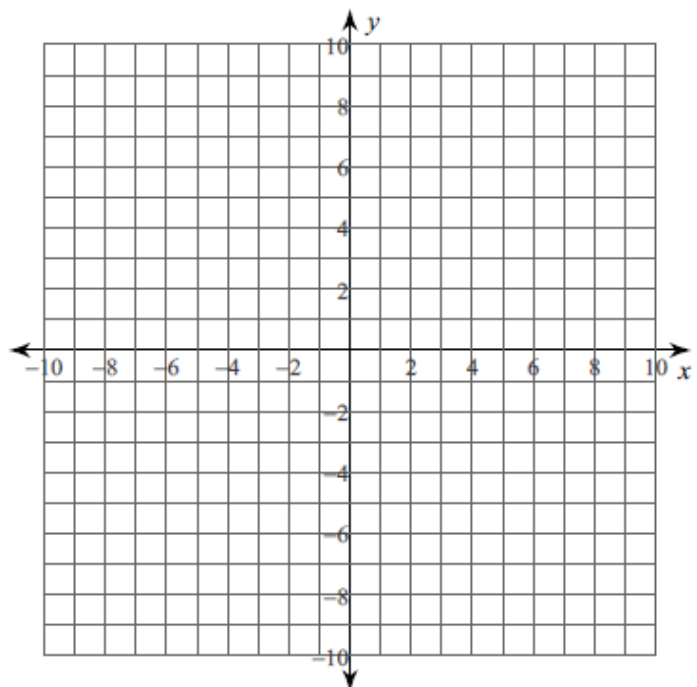
b) how many matches of each kind are in progress?

3-2 Graphing systems of Inequalities

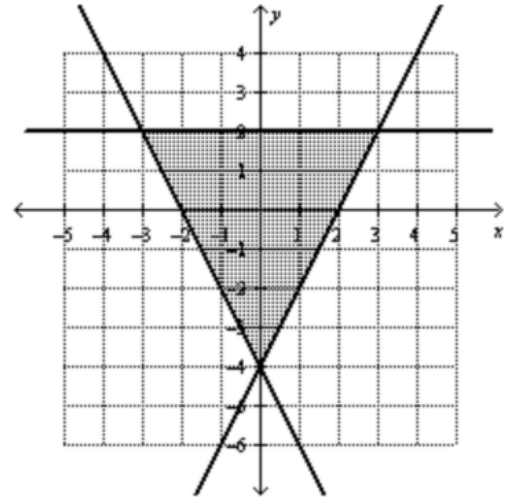
15) Solve the system of Inequalities by Graphing:

$$y \geq 2x - 3$$

$$y < -x + 2$$



16) Write the system of inequalities shown in the graph.



17) Graph the system of Inequalities. Name the coordinates of the vertices of the feasible region.

$$y \geq 3$$
$$y \leq 6$$
$$y \leq 3x + 10$$
$$y \leq -2x + 8$$

