Algebra 2 Standard 2 Review Name: Date:

1. What is the solution to a system of linear equations?



1. Sketch a graph of a system with each of the following number of solutions.

a. Zero solutions b. One Solution c. Two solutions d. ∞ solutions

   

1. What is the **best method** for solving the following systems? Why?

a. y = 3x – 2 b. 4x + 6y = 5

3x + 7y = 4 3x + 5y = 6

1. **LT 2.1 Students will be able to solve a system of equations by graphing.**



a. y = 3x – 5 b. 2x – 3y = 6

y = -1/2x + 2 y = x – 1

Solution: \_\_\_ Solution:

1. **LT 2.2 Students will be able to solve a system of equations by substitution.**

a. x = 5y b. y = x + 7

2x– 4y = 12 4x + 5y = 8

c) 3x + 6y = 2 d) 2x − y = 4

x = -2y + 4 y = 2x + 3

1. **LT 2.3 Students will be able to solve a system of equations by elimination.**

a. 2x – 2y = 6 b. 2x – 3y = -2

4x + 2y = 12 4x + 5y = 18

c) -3x + 2y = -5 d) 2x + y = 3

6x − 4y = 10 6x + 3y = 10

1. **LT 2.4 Students will be able to solve application problems involving systems.**

Fred Meyer is having a sale. Short sleeve T-shirts are $9 and long sleeve are $12. You spend a total of $96 on 9 items. How many of each type did you buy?

*Define variables. Write two equations and solve (show all steps). Write a solution sentence.*

**LT 2.5 Students will be able to solve linear inequalities and a system of linear inequalities.**

1. Create the graph of the solution of the given system of inequalities.

Then decide if the following points are solutions (yes/no).



y > 3x – 2

3x + 6y ≤ 12

a. (-1, -5): b. (-4, 2):

c. (-2, 3): d. (4, 3):

1. Solve the following systems of linear inequalities.



a. y ≥ 4x – 3 b. 2x + y < 4

y < -2x + 3 y ≥ -3;

x > 1

1. Solve the systems. Use any method.

a. 2x – 3y = -2 b. 4x – 3y = 25

y = -4x + 24 -3x + 8y = 10