

Algebra 2

Name _____ ID: 1

Assignment

Date _____ Period _____

Solve each system by graphing, on graph paper.

1) $3 + \frac{39}{8}x = \frac{3}{8}y$
 $-\frac{8}{13} + \frac{1}{13}y = x$

2) $-3y = 2x + 24$
 $-3y + 2x = 12$

Solve each system using any method of your choice.

3) $54 + 6x = -12y$
 $30 = -30y - 36x$

4) $-14y - 9x = 1$
 $-20 + 2x = 7y$

5) $5y - 19 = -6x$
 $0 = -18x + 2 - 4y$

6) $x - 3y = -17$
 $2x - 3y = -13$

7) $x - 8y = -16$
 $6x + 4y = 8$

8) $3x - 2y = -18$
 $x - 8y = 16$

9) $18x - 21y = -33$
 $6x - 7y = -11$

10) $8x + 2y = -10$
 $6x + 4y = 0$

11) $-4x + 4y = -16$
 $-x - y = -12$

Choose the point that is a solution to the system.

12) $x = 1 - y$
 $0 = -6y - 14 + 4x$

- A) (2, 1) B) (-1, -1)
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- C) (2, -1) D) (1, 1)

13) $0 = 24 + 21x - 27y$
 $7y - 12 = 4x$

- A) (-4, 4) B) (4, 4)
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- C) (-2, 4) D) (4, -4)

14) $-5 + 5y + 3x = 0$
 $-11y - 11x = 11$

- A) (5, 4) B) (-5, 4)
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- C) No solution D) (5, 8)

- 15) Looking Ahead: Ryan and Kathryn are selling pies for a school fundraiser. Customers can buy apple pies and lemon meringue pies. Ryan sold 3 apple pies and 12 lemon meringue pies for a total of \$132. Kathryn sold 9 apple pies and 9 lemon meringue pies for a total of \$126. What is the cost each of one apple pie and one lemon meringue pie?
*Can you write two equations to represent this situation?!
- A) apple pie: \$4, lemon meringue pie: \$10 B) apple pie: \$10, lemon meringue pie: \$4
C) apple pie: \$2, lemon meringue pie: \$7 D) apple pie: \$3, lemon meringue pie: \$13
- 16) Looking Ahead: Eduardo's school is selling tickets to a fall musical. On the first day of ticket sales the school sold 12 senior citizen tickets and 9 child tickets for a total of \$228. The school took in \$116 on the second day by selling 2 senior citizen tickets and 8 child tickets. What is the price each of one senior citizen ticket and one child ticket?
*Can you write two equations to represent this situation?!
- 17) Looking Ahead: Perry and Jasmine each improved their yards by planting grass sod and shrubs. They bought their supplies from the same store. Perry spent \$122 on 14 ft² of grass sod and 5 shrubs. Jasmine spent \$84 on 8 ft² of grass sod and 10 shrubs. Find the cost of one ft² of grass sod and the cost of one shrub.
*Can you write two equations to represent this situation?!