

VLO-Systems of Equations-Week 4

45 Questions

NAME :	_
CLASS :	_
DATE :	_







4. Christian had brochures printed for a new business venture. Christian originally ordered 4 boxes of black-and-white brochures and 3 boxes of color brochures, which cost a total of \$134. After those ran out, Christian spent \$120 on 3 boxes of black-and-white brochures and 3 boxes of color brochures. Which system represents this situation?

□ a)	x+y=134 x+y=120	b)	3x+3y=134 4x+3y=120
□ c)	4x+3y=134 3x+3y=120	d)	7xy=134 6xy=120

- David is running a concession stand at a soccer game. He sells nachos and sodas. Nachos cost \$1.50 each and sodas cost \$0.50 each. At the end of the game, David made a total of \$78.50 and sold a total of 87 nachos and sodas combined. Which system of equations represents this situation?
- \square a) 1.5x+0.5y=78.5 \square b) 1.5x+0.5y=78.5x+y=871.5x+0.5y=87 \square c) x+y=78.5 \square d) x+y=78.51.5x+0.5y=87x+y=87

6.	If a system of equations has no solution, what look like?	does th	e graph
	a) intersecting lines	∐ b)	parallel lines
	c) skew lines	∐ d)	intersecting lines
7.	Does the system have one, none or infinite so 8x + 4y = 12 y = -2x + 3	lutions?	
	a) (0,3)	□ b)	(3,0)
	c) No solution(parallel lines)	🗌 d)	Infinitely many solutions

- A sporting goods store sells left haded (x) and right handed (y) gloves. In one month, 12 gloves were sold for a total of \$561.
 Right handed gloves cost \$45 each and left handed gloves cost \$52. Which system could be solved to determine the number of each type of glove sold?
- a) x + y = 561b) x + y = 1245x + 52y = 1252x + 45y = 561c) x + y = 12d) x + y = 56145x + 52y = 56152x + 45y = 12
- 9. 1. The cost of 5 squash and 2 zucchini is \$1.32. Three squash and 1 zucchini cost \$0.75. Write a system of equations.
- \Box a) 5q + 2z = 1.32 \Box b) 5q + 2z = 1.321z = 0.753q + 1z = 0.75 \Box c) q + z = 1.32 \Box d) 5q + 2z = 0.75q + z = 0.753q + 1z = 1.32



Solve the following system by graphing. What is the solution?



□ a) (-4, 2) □ c) (2, -4)

b)	(4, 2)
d)	(2, 4)

14.



Solve the following system by substitution. What is the solution?

□ a) (1, -2)

□ c) (-4, 1)

b)	(-2, 1)
d)	(2, 1)

- 15. Solve the system using any method.-4x 4y = 04x + 4y = 0 \Box a) (-6, -4) \Box b) Infinite number of solutions \Box c) No solutions \Box d) (6, 4)
- 16. Solve for x and y using any method we've learned! y = 2x + 1 y = 4x - 1
 □ a) (1,3) □ b) (-1,-3)
 □ c) (-1,3) □ d) (3,1)

17.	Solve the system of equations below:	
	9x - 4y = 1	
	-3x + 8y = -47	
	a) (3, -7)	🗌 b) (-3, 7)
	c) (-3, -7)	□ d) (-7, -3)

18. Solve by elimination: 3x+7y=23

-3x-7y=-17

□ c) (1,-2)

a) No solution	b)	ARN
c) (-3,3)	d)	(3,3)

19.	Solve by elimination:			
	4x+9y=28			
	-4x-y=-28			
	a) (-7,0)		b)	(6,0)
	c) (-6,0)		d)	(7,0)

20.	Solve by graphing: y=5x+3		
	y=-2x-4		
🗌 a	a) (2,-1)	□ b)	(-1,-2)

□ d) (-2,-1)

21. Solve by elimination:9x-4y=7	
x-4y=-17	
□ a) (-1,5)	□ b) (-7,5)
□ c) (7,5)	☐ d) (3,5)
22. Solve by elimination: 7x-9y=29	
7x+2y=-15	
□ a) (-4,-1)	□ b) (-14)
□ c) (-1,4)	☐ d) (-1,6)
23. What does the x represent in this situation Manny's Music Rental charges a fee of \$4 month to rent a saxophone. Sid's Saxopho plus \$30 per month to rent the same saxop y = 25x + 40 y = 30x + 25	? 0 plus \$25 per ones charges \$25 ohone.
a) price of a saxophone	☐ b) rental fee
□ c) total cost	☐ d) number of months
24. The solution of a system of linear equation	IS İS
a) the y-intercept (b)	 b) the intersection of the two equations on a graph

□ c) the second equations' answers

 \Box d) the slope (m)

What is the solution to this system of equations?



	b)	(-1, 4	4)
	d)	(-4, -	-1)

26.	Solve the system of equations.
	x + 2y = -3
	x - y = -12

□ c) (-4, 1)

□ a) (-9, 3)	□ b) (-7 ,5)
□ c) (3, 15)	🗌 d) (9, 6)

27.	Solve the system of equations.			
	y = 4x + 1			
	3x + 2y = 13			
🗌 a	a) (1, 5)	b)	(5,	1)
□ c	:) (0.25, 2)	d)	Ø	

28.	Solve for x and y	
	y = 2x + 1	
	y = 4x - 1	
🗌 a	a) (1,3)	b) (-1,-3)
	c) (-1,3)	d) (3,1)



30. Solve for x and y. y = 2/3x - 2 y = -x + 3
□ a) (0,3) □ b) (0,-3)
□ c) (3,0) □ d) (-3,0)



Steffen graphed two lines in order to find the solution to a given system of equations. What is the solution?

□ b) (-8,-3) □ d) (8,3)



- 🗌 a) (3, -1)
- C) No Solution

Ц	b)	(2, -6)
	d)	(6, -2)





What	is	the	solution?

a) (1,-1)	b)	(-1, 1)
c) (0, -2)	d)	(0, 1)

34. Solve the system of equations by elimination. -x + y = -13

-x + y = -13-8x - 4y = -8

□ a) (5, 8)	☐ b) (5, -8)
□ c) (-5, -18)	🗌 d) (-5, 8)

35. Determine if (4, 1) is a solution for the system of equations.

y = -x + 5 y = 2x - 7

□ a) yes □ b) no

36. Alexandra finds that she can give 3 haircuts and 2 hair dyes in 315 minutes. Giving 2 haircuts and 4 hair dyes takes 450 minutes. Which system of equations represents the situation?

- \square a) 3x + 2y = 315 \square b) 3x + 2y = 4502x + 4y = 4502x + 4y = 315
- c) 2x + 2y = 3153x + 4y = 450

37. Alexandra finds that she can give 3 haircuts and 2 hair dyes in 315 minutes. Giving 2 haircuts and 4 hair dyes takes 450 minutes. How long does it take her to do a haircut?
3x + 2y = 315 2x + 4y = 450

a) 45 minutes

□ b) 90 minutes2x + 4y = 315

d) 30 minutes

□ c) 60 minutes
 3x + 4y = 450

38. Some students want to order shirts with their school logo. One company charges \$9.65 per shirt plus a setup fee of \$43.
Another company charges \$8.40 per shirt plus a \$58 fee.
Which equation represents the number of shirts when both companies charge the same amount?

□ a) y = 9.65 + x	□ b) y = 9.65x + 43
y = 8.40 + x	y = 8.40x + 58
□ c) y =9.65x	☐ d) y = 9.65x - 43
y = 8.40x	y = 8.40x - 58

39.	Solve for x and y	
	3x + 2y = 16	
	7x + y = 19	
<u> </u>	a) (-2,5)	□ b) (-2,-5)
	c) (2,-5)	□ d) (2,5)

40. There are 50 donkeys and chickens on a far. There are a total of 174 legs. Which system below can be used to figure out how many of each animal the farm has?

 a) d + c = 174 b) d + c = 50

 4d + 2c = 50 4d + 2c = 174

 c) d + c = 50 d) d + c = 174

 2d + 4c = 174 2d + 4c = 50

41.	The equations of two lines are:	
	2x-y=4 and $y=-2x+8$.	
	What is the value of \mathbf{x} in the solution for thi	s system?
🗌 a	a) x=8	□ b) x=3
	e) x=11	□ d) x=5

42.	What is the value of the y-coordinate of the solution to the
	system of equations
	x-2y=1
	x+4y=7

🗌 a) 1	□ b) -1
□ c) 3	□ d) 4

43. Solve using substitution. x - 2y = 2 3x + 4y = 3	
□ a) (1.4, -0.3)	□ b) (3.1, 5)
□ c) (-2.5, 3.5)	☐ d) (6.9, 1.02)
44. $y = -6x + 5$	
-2x + y = 5	
□ a) (-3, -6)	□ b) (-6, 3)
□ c) (0, 5)	□ d) (-3, 5)

- 45. A system of linear equations is...
- □ a) Math Magic
- □ c) Always more than 2 equations
- ☐ b) One Equation
- \Box d) A set of 2 or more equations