Student's Name:_____

Teacher's Name:_____

LEON HIGH SCHOOL

ALGEBRA 1A

REVIEW PACKET

CONTACT INFORMATION

Mr. Darrin Minns	
Remind: Text "@minns1a" to 81010 or go to remind.com/join to receive email alerts	**Email:** minnsd2@leonschools.net
Khan Academy: Go to khanacademy.org and sign up as a "Learner" using class code: TWAN3MRP	
Mrs. Martina Taylor	
Remind: Text the appropriate code to 81010 or go to remind.com/join to receive email alerts Per 1: @1leonalg1a Per 2: @2leonalg1a Per 3: @3leonalg1a Per 4: @4leonalg1a	**Email:** taylorm2@leonschools.net
Khan Academy: You already have a Khan Academy account. DO NOT create a new one. If you are having login issues, contact Mrs. Taylor to help you reset your password.	

LEON HIGH SCHOOL

ALGEBRA 1A

5/11 – 5/15 (WEEK 7)

The following are the plans for the week of learning. The day by day schedule is here as a guide for you to maximize your learning experience. A quiz covering this material will be taken on 5/14-5/15. All work will either be sent to your teacher electronically or returned to the school. If needed, your teacher will send out more information regarding watching videos on Algebra Nation and Khan Academy or receiving a game code for Quizizz. As always, contact your instructor through Remind or email if you have any additional questions.

Week 7

	Notes if you DO have Internet	**Notes if you DON'T have internet**	**Problem Set to Complete**
Day 1 5/11	Review all Notes	Review all Notes	All Systems Review WS (1-11 odd)
Day 2 5/12	Review all Notes	Review all Notes	All Systems Review WS (2-12 even)
Day 3 5/13	Review all Notes	Review all Notes	All Systems Review WS (13-20 ALL)
Day 4 5/14	Review all Notes	Review all Notes	Quizizz: **All Systems Quiz** **Have internet?** Get the game code from your teacher & complete the activity online **Don't have internet?** Complete the printed Quizizz activity in this packet
Day 5 5/15	Review all Notes	Review all Notes	Same as Day 4

Algebra 1A Name_____

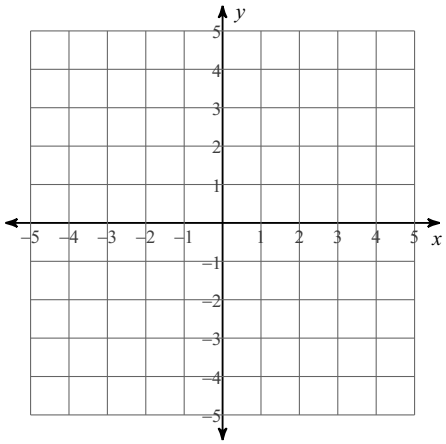
All Systems Review

Teacher_____

Solve each system by graphing.

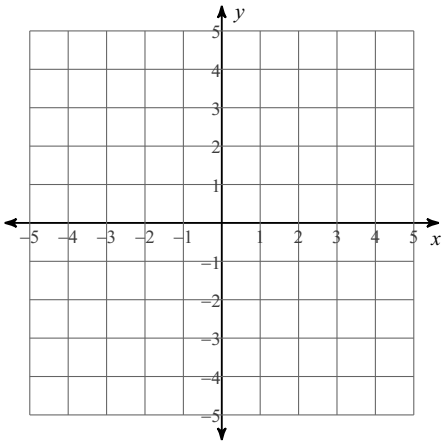
1) $y = -\frac{1}{3}x - 2$

$y = -\frac{4}{3}x + 1$



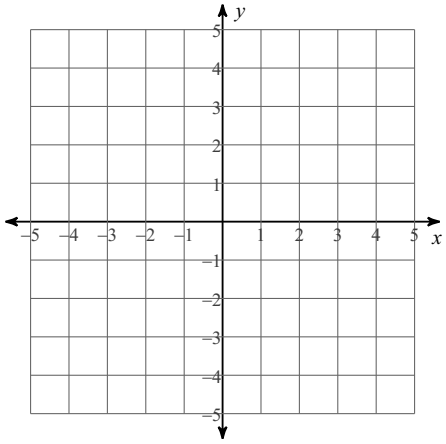
2) $y = \frac{1}{3}x - 4$

$y = -\frac{1}{3}x - 2$



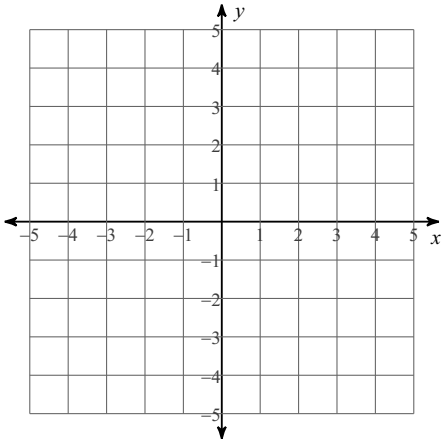
3) $y = -\frac{1}{2}x + 4$

$y = \frac{1}{2}x + 2$



4) $y = -\frac{3}{2}x - 4$

$y = \frac{1}{2}x + 4$



Solve each system by substitution.

5) $3x + 5y = -2$
$y = 5x + 22$

6) $-2x + 7y = -19$
$y = 2x + 11$

7) $y = 4x + 10$
$-6x + 2y = 16$

8) $y = 4x + 5$
$2x - 4y = 8$

Solve each system by elimination.

9) $3x - 5y = 8$
$-10x + 5y = 20$

10) $-7x + 3y = 3$
$7x + 6y = 6$

11) $-8x - 5y = -8$
$16x - 4y = 16$

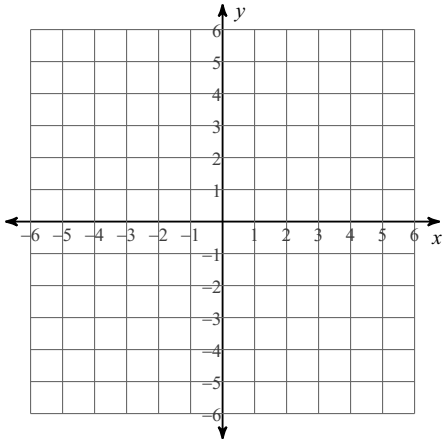
12) $3x - 4y = 8$
$-6x - 6y = -30$

13) The school that Scott goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 9 adult tickets and 9 child tickets for a total of $180. The school took in $44 on the second day by selling 1 adult ticket and 5 child tickets. Find the price of an adult ticket and the price of a child ticket.

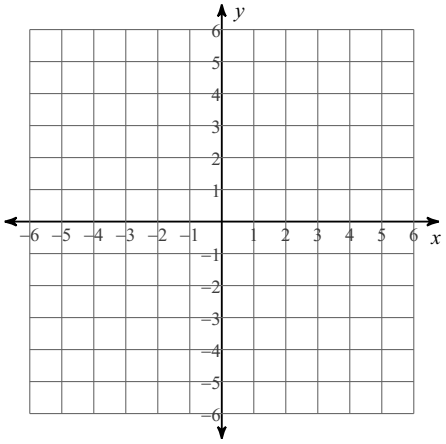
14) The indoor climbing gym is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 4 vans and 4 buses with 148 students. High School B rented and filled 9 vans and 8 buses with 313 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.

Sketch the graph of each linear inequality.

15) $y \geq -\frac{1}{2}x - 1$

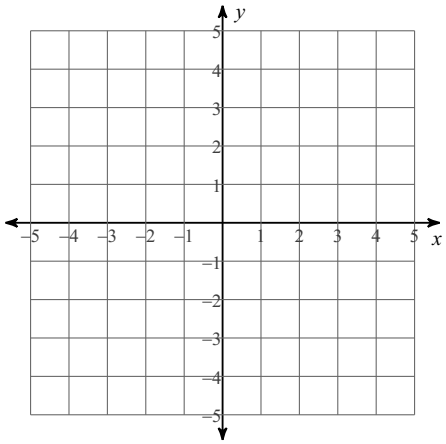


16) $y < -\frac{4}{3}x + 1$

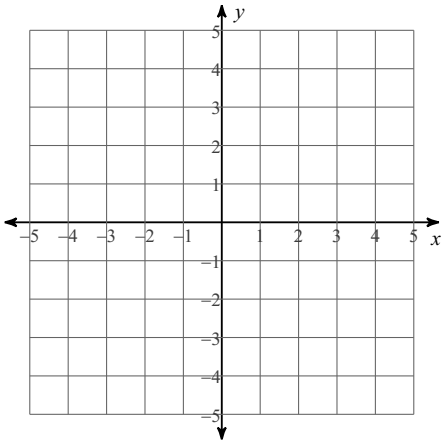


Sketch the solution to each system of inequalities.

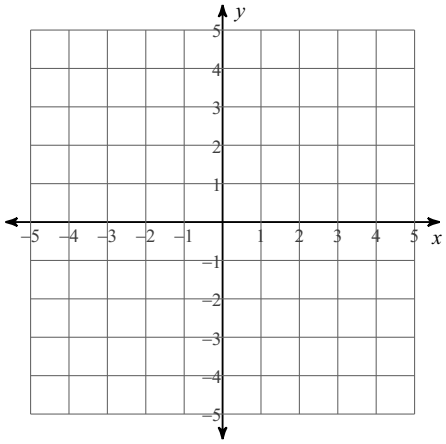
17) $y > -2$
$y > -x - 1$



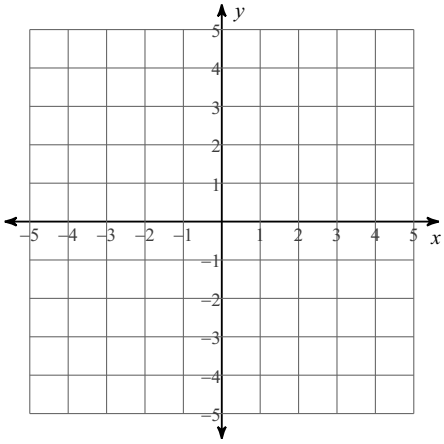
18) $y \leq -\frac{1}{3}x - 3$
$y > \frac{1}{3}x - 1$



19) $y \geq 2x - 1$
$y \leq 3$



20) $y \leq -\frac{4}{3}x + 3$
$y \geq \frac{2}{3}x - 3$



NAME : _____

CLASS : _____

DATE : _____

All Systems Quiz

30 Questions

1. Solve for x and y (Use Substitution)

$$y = 4x + 1$$

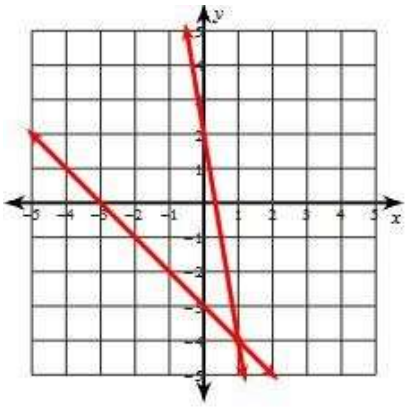
$$3x + 2y = 13$$

☐ a) (1, 5)

☐ b) (5, 1)

☐ c) (0.25, 2)

☐ d) ∅

2. 

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

☐ a) (-1, 4)

☐ b) (1, -4)

☐ c) (-4, 1)

☐ d) (4, -1)

3. Solve for x and y. Use elimination.

$$3x + 2y = 16$$
$$7x + y = 19$$

☐ a) (-2,5)

☐ b) (-2,-5)

☐ c) (2,-5)

☐ d) (2,5)

4. If a system of linear equations has one solution, what does this mean about the two lines?

- ☐ a) Parallel lines
- ☐ b) the same line
- ☐ c) Intersecting lines

5. Solve for x and y (Use Substitution)

$2x - 3y = -1$

$y = x - 1$

- ☐ a) (-2,-3)
- ☐ b) (0,-1)
- ☐ c) (3,4)
- ☐ d) (4,3)

6. Solid or dashed line? y <

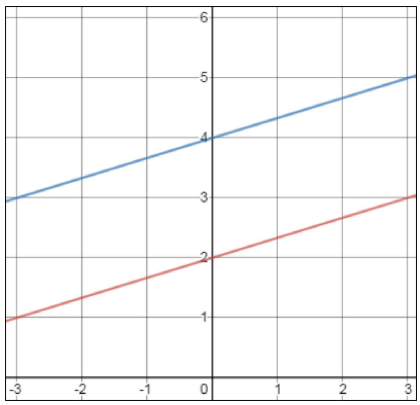
- ☐ a) Solid
- ☐ b) Dashed

7. Solve the system of equations. Use elimination.

$$x + 2y = -3$$

$$x - y = -12$$

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

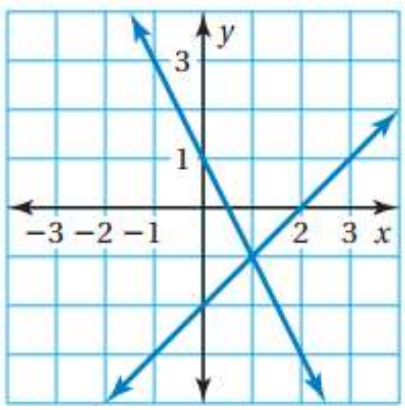
8. 

How many solutions are there in the system of equations?

- ☐ a) No Solution
- ☐ b) Infinitely Many Solutions
- ☐ c) One Solution
- ☐ d) Two Solutions

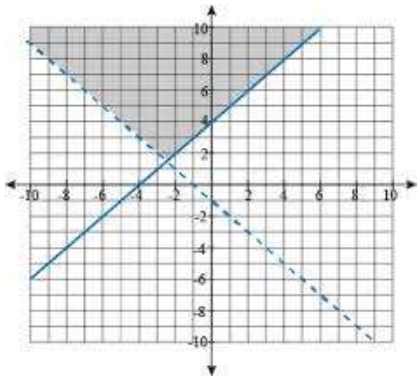
9. The solution (x, y) to a system of equations is the point where they...?

- ☐ a) Run off the graph
- ☐ b) Don't touch
- ☐ c) Intersect
- ☐ d) Exist

10. 

What is the solution?

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

11. 

Which system of inequalities is shown?

- ☐ a) $y \geq -x - 1$
  $y < x + 4$
- ☐ b) $y < -x - 1$
  $y \geq x + 4$
- ☐ c) $y > -x - 1$
  $y \geq x + 4$
- ☐ d) $y > -x - 1$
  $y \geq x + 3$

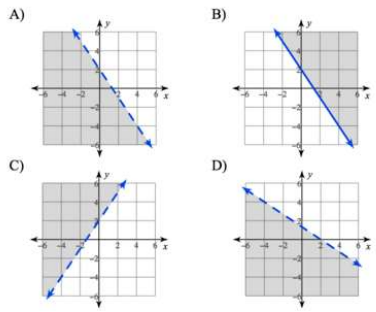
12. Solve. Use substitution.

$$6x + 2y = -20$$
$$y = -2x - 4$$

- ☐ a) (-5, -14)
- ☐ b) (1, 6)
- ☐ c) (-6, 8)
- ☐ d) (2, -8)

13. Sketch the graph of each linear inequality.

2) $y \geq -\frac{3}{2}x + 2$



Select the correct graph for the inequality.

$$y \geq -\frac{3}{2}x + 2$$

- ☐ a) A
- ☐ b) B
- ☐ c) C
- ☐ d) D

14. Which of the following is not a method to solve systems?

- ☐ a) Elimination
- ☐ b) Difference of Squares
- ☐ c) Substitution
- ☐ d) Graphing

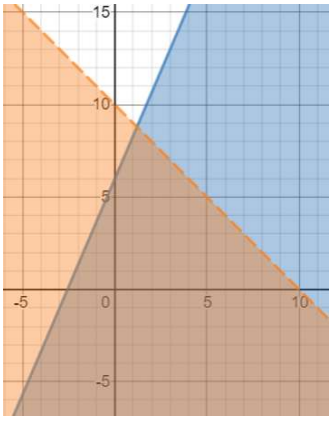
15. Solve the system. Use elimination.

$$5x + 3y = 6$$
$$x - 3y = 12$$

- ☐ a) (3,3)
- ☐ b) (-3,-3)
- ☐ c) (3,-3)
- ☐ d) (3,-2)

16. A _____ is a set of two or more equations that have the same variables.

- ☐ a) solution of a system
- ☐ b) elimination method
- ☐ c) system of equations
- ☐ d) table

17. 

Which point is in the **overlap (solution)** of the shaded region?

- ☐ a) (5,0)
- ☐ b) (-1,8)
- ☐ c) (1,15)
- ☐ d) (10,5)

18. Solve using elimination.

$$3x - 2y = -8$$
$$5x + 2y = -8$$

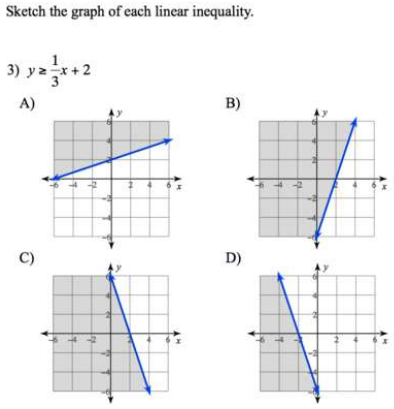
- ☐ a) (1,-4)
- ☐ b) (-1,-4)
- ☐ c) (-4,1)
- ☐ d) (-2,1)

19. Solid or dashed line?
Y ≥

- ☐ a) Solid
- ☐ b) Dashed

20. 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?

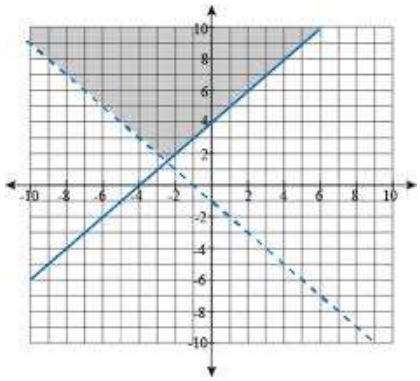
- ☐ a) 3x + 2y = 315
  2x + 4y = 450
- ☐ b) 3x + 2y = 450
  2x + 4y = 315
- ☐ c) 2x + 2y = 315
  3x + 4y = 450

21. 

Select the correct graph for the inequality.

$$y \geq \frac{1}{3}x + 2$$

- ☐ a) A
- ☐ b) B
- ☐ c) C
- ☐ d) D

22. 

Is (-2,4) a solution to the system?

- ☐ a) Solution
- ☐ b) Not a solution

23. Shade above or below?
y <

- ☐ a) Above
- ☐ b) Below

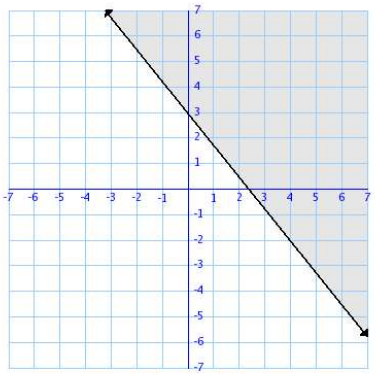
24. On Monday Joe bought 10 cups of coffee and 5 doughnuts for his office at the cost of $16.50. It turns out that the doughnuts were more popular than the coffee. On Tuesday he bought 5 cups of coffee and 10 doughnuts for a total of $14.25. Which equations could be used to determine the cost of the coffee?

☐ a) 10c + 5d = 14.25
5c + 10d = 16.50

☐ b) 10c + 5d = 16.50
5c + 10d = 14.25

☐ c) c + d = 10
5c + 10d = 16.50

☐ d) c + d = 5
5c + 10d = 16.50

25. 

Which of the following equations match the given graph?

☐ a) $y \leq -\frac{5}{4}x + 3$

☐ b) $y \geq -\frac{5}{4}x + 3$

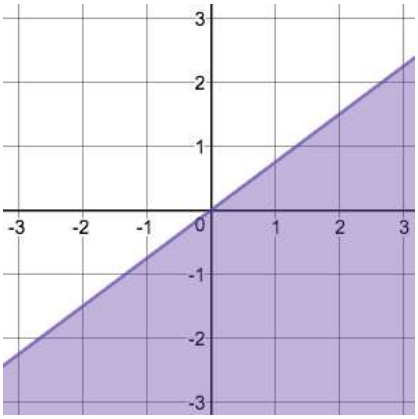
☐ c) $y < -\frac{5}{4}x + 3$

☐ d) $y > -\frac{5}{4}x + 3$

26. Shade above or below?
y ≥

☐ a) Above

☐ b) Below

27. 

Choose the correct inequality for this graph.

☐ a) $y < \frac{3}{4}x$

☐ b) $y > \frac{4}{3}x$

☐ c) $y < \frac{4}{3}x$

☐ d) $y \leq \frac{3}{4}x$

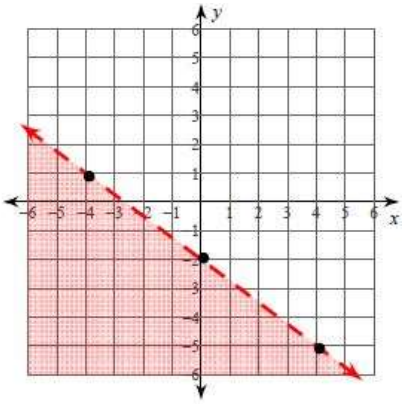
28. What is the definition of y-intercept?

☐ a) The point where the graph of the line crosses the x-axis.

☐ b) The point where the graph of the line crosses the y-axis.

☐ c) The point where the graph of the line crosses the z-axis.

☐ d) The point where the graph of the line crosses the c-axis.

29. 

☐ a) $y < -\frac{3}{4}x - 2$

☐ b) $y > -\frac{3}{4}x - 2$

☐ c) $y \leq -\frac{3}{4}x - 2$

☐ d) $y \geq -\frac{3}{4}x - 2$

30. Consider the function $y<2x+3$. Which is true?

- ☐ a) The line would be solid with shading above.
- ☐ b) The line would be dashed with shading above.
- ☐ c) The line would be solid with shading below.
- ☐ d) None of these.