

Math Review  
Intro to Math 2

Name \_\_\_\_\_

1) Solve the equation:  $\frac{x}{6} = 8$

2) Solve the equation:  $3w + 7 = 19$

3) Solve the equation:  $5h + 2(11 - h) = -5$

4) Solve the equation:  $5x + 2 = 5x - 1$

5) Solve the equation:  $|d| = 23$

1) _____
2) _____
3) _____
4) _____
5) _____

6) Solve the equation:  $|4p + 2| + 8 = 11$

7) Solve for  $y$ :  $20x + 5y = 15$

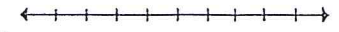
8) Graph the inequality:  $5 > x + 3$

9) Solve the inequality:  $-9x \leq 18$

10) Graph the compound inequality:  $8 \leq 3x - 1 < 14$

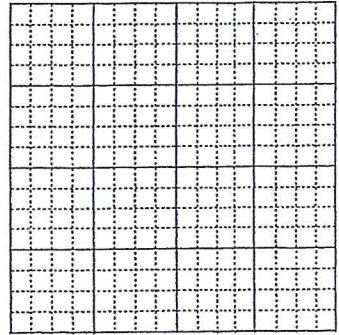
6)	_____
7)	_____
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8)	_____
9)	_____
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10)	_____

11) Graph the inequality:  $|x| > 7$



11) \_\_\_\_\_

12) Graph the linear function:  $y = \frac{2}{3}x - 1$



12) \_\_\_\_\_

13) Evaluate the function  $f(x) = 4x - 11$  for  $x = 7$

13) \_\_\_\_\_

14) Find the value of  $x$  so that the function has the given value:

$$f(x) = 4x + 15; f(x) = 7$$

14) \_\_\_\_\_

15)

15) Find the intercepts:  $4x - 3y = 12$

16) Find the slope of the line through the points (4, 10) and (7, 6)

16) \_\_\_\_\_

17) Write a slope-intercept equation of the line through the points (2, 7) and (0, -5)

17) \_\_\_\_\_

18) Write an equation of the line that passes through the point: (-8, -2) and has the given slope:  $m = 5$

18) \_\_\_\_\_

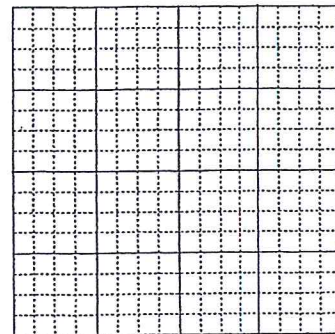
19) Write an equation of the line through the points (-5, 19) and (5, 13)

19) \_\_\_\_\_

20) Write an equation of the line that passes through the point (2, -5) and is parallel to the line:  $y = \frac{3}{2}x + 5$

20) \_\_\_\_\_

21) Sketch a scatterplot that shows a strong, positive correlation.

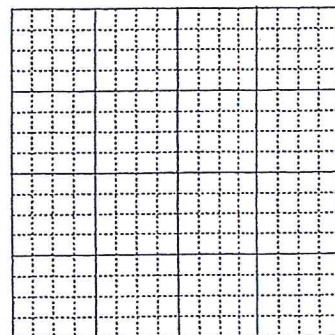


21) \_\_\_\_\_

22) Solve by graphing:

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

$$y = 2x + 5$$



22) \_\_\_\_\_

23) Solve with substitution:

$$3x - 4y = 13$$

$$y = 4x$$

23) \_\_\_\_\_

24) Solve with elimination:

$$-9x - 4y = -21$$

$$7x + 4y = 19$$

24) \_\_\_\_\_

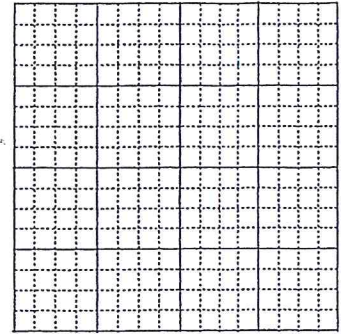
25) Solve the system:

$$-15x + 18y = 12$$

$$15x - 18y = -12$$

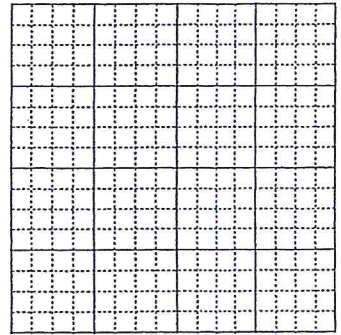
25) \_\_\_\_\_

26) Graph the linear inequality:  $y < -\frac{5}{4}x + 3$



26) \_\_\_\_\_

27) Graph the function:  $y = 3 \cdot 2^x$



27) \_\_\_\_\_

28) Write an exponential function that represents the situation:  
"College enrollment of 22,500 increases by 14% each year"

28) \_\_\_\_\_

29) Write an exponential function that represents the situation:  
"Profits of \$100,000 decreases by 2% each year"

29) \_\_\_\_\_

30) Solve the equation:  $3^{8x} = 3^{5x-6}$

30) \_\_\_\_\_