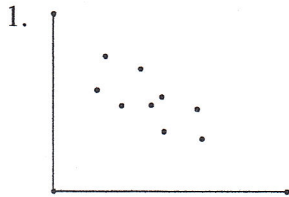


Algebra 1

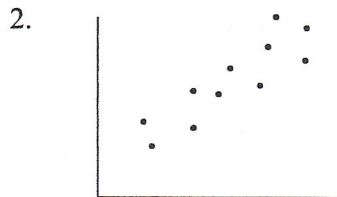
Practice Quiz 4.5-4.7

NAME _____

Determine whether each graph shows a positive correlation, negative correlation, or no correlation. (2 Points)



Negative (down to right)



Positive (up to right)

1. _____

2. _____

3a. _____

3b. _____

4. _____

5. _____

Write an equation in slope-intercept form for each graph. (4 Points)

3. a. Use the points (5, 12) and (2, 31) from the scatter plot to the right to write the slope-intercept form of the equation for the line of fit.

b. Then, predict miles per gallon of a car that weighs 6.1.

$$a. \frac{31-12}{2-5} = \frac{19}{-3} = -6.3$$

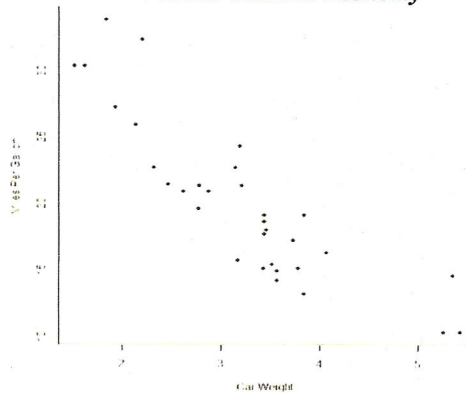
$$y-12 = -6.3(x-5)$$

$$y-12 = -6.3x + 31.5$$

$$y = -6.3x + 43.5$$

$$b. y = -6.3(6.1) + 43.5 = 5.1$$

Vehicle Gasoline Economy



Write an equation of the regression line for the data in each table below and then find the correlation coefficient (r). Use Calculator. (4 Points)

4. The table shows the percentage of freshman free throws made over a five year span.

Year	2001	2002	2003	2004	2005
%	37.2	40.8	47.5	39.3	34.9

$$y = -0.6x + 41.8$$

5. The table shows the average amount of time spent by freshman getting some sort of exercise the past few years.

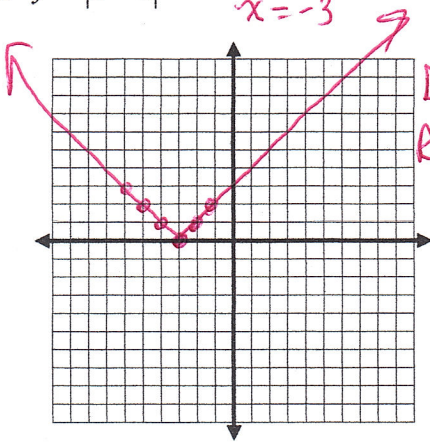
Year	2010	2011	2012	2013	2014
Minutes	72	79	64	52	47

$$y = -7.7x + 85.9$$

Points(16) _____

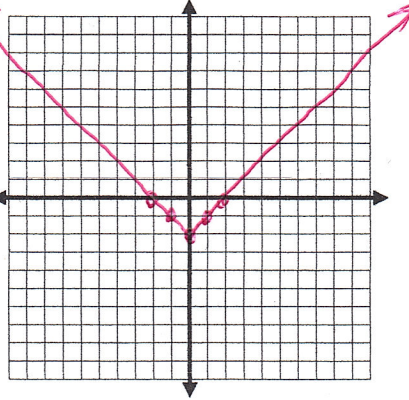
Graph each function. State the domain and range. (4 Points)

6. $y = |x + 3|$ $x + 3 = 0$
 $x = -3$



$D: \{ \mathbb{R} \}$
 $R: \{ \mathbb{R} \geq 0 \}$

7. $y = |x| - 2$

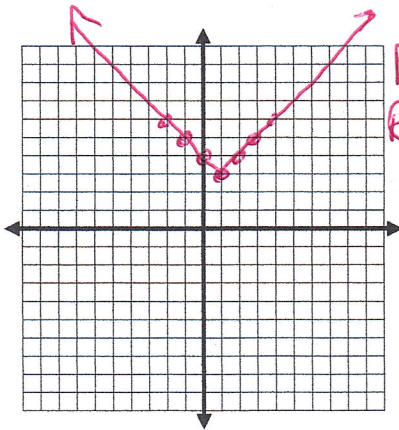


$D: \{ \mathbb{R} \}$
 $R: \{ \mathbb{R} \geq -2 \}$

6. $D:$
 $R:$

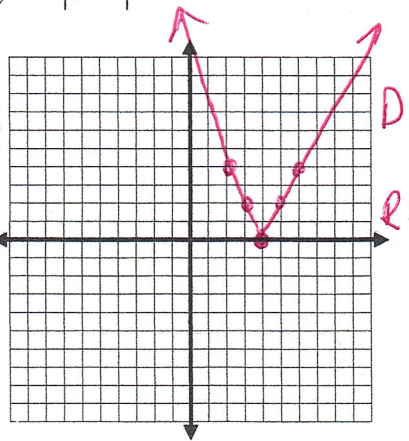
7. $D:$
 $R:$

8. $y = |x - 1| + 3$



$D: \{ \mathbb{R} \}$
 $R: \{ \mathbb{R} \geq 3 \}$

9. $y = 2|x - 4|$

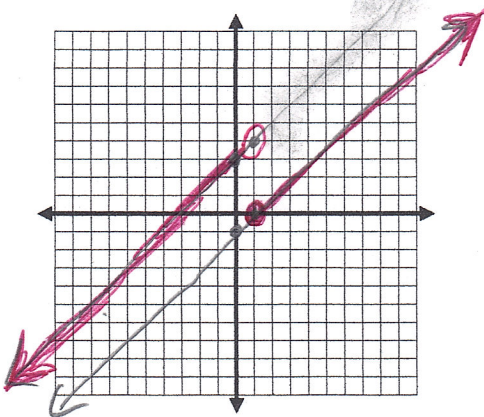


$D: \{ \mathbb{R} \}$
 $R: \{ \mathbb{R} \geq 0 \}$

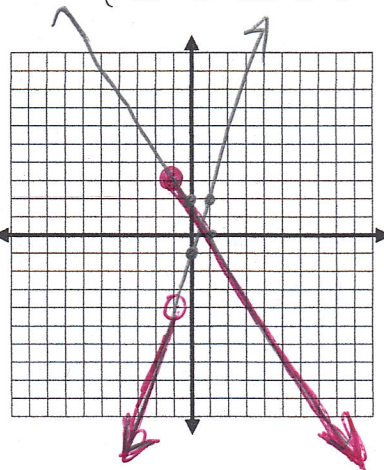
8. $D:$
 $R:$

9. $D:$
 $R:$

10. $f(x) = \begin{cases} x + 3 & \text{if } x < 1 \\ x - 1 & \text{if } x \geq 1 \end{cases}$



11. $f(x) = \begin{cases} 3x - 1 & \text{if } x < -1 \\ -2x + 2 & \text{if } x \geq -1 \end{cases}$



11. $D:$
 $R:$

Points(24) _____