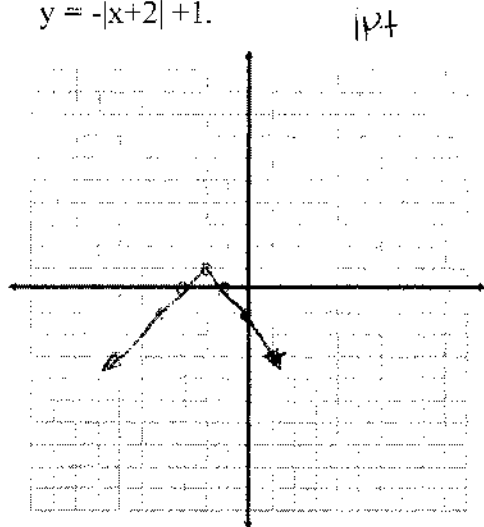


ALGEBRA I  
Chapter 5 Formative Assessment #3

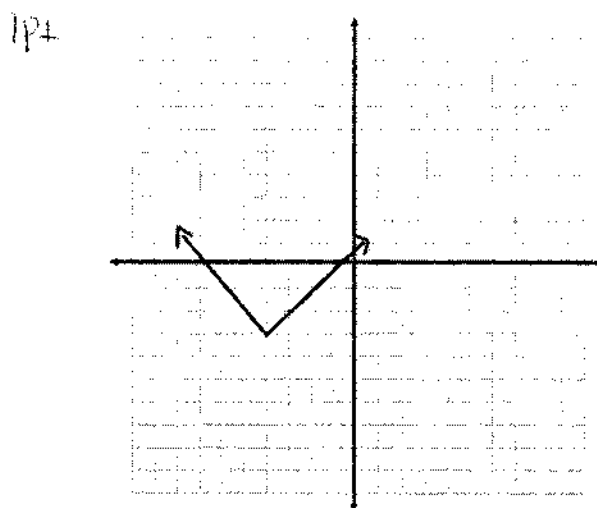
NAME: Key  
PER: \_\_\_\_\_

- 1.) Graph, without a t chart, the equation  
 $y = -|x+2| + 1$ .



opens down  
left 2  
up 1

- 2.) Write the equation of the graph shown below



left 4 down 3  
opens up

$$y = |x+4| - 3$$

3. Write the equation if  $y = |x|$  were translated 3 units right and 2 units up. 1pt

$$y = |x-3| + 2$$

Score: #1-3 13

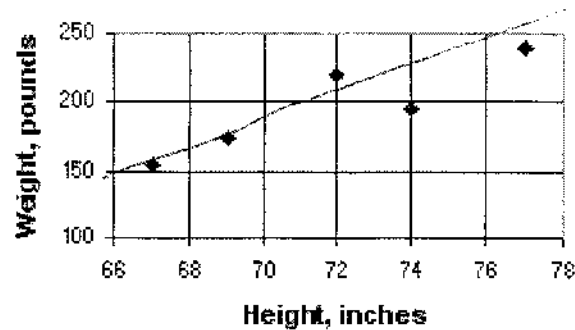
Score: #4a 11  
#4b 14  
#4c 11

#4d 11

Score #5 11  
Score #6 11

4.) The scatter plot shows the weight and height of basketball players. Use the scatter plot to answer the following questions.

| Height, inches | Weight, pounds |
|----------------|----------------|
| 67             | 155            |
| 72             | 220            |
| 77             | 240            |
| 74             | 195            |
| 69             | 175            |



- a.) Draw the line of best fit to show the correlation. 1pt
- b.) What kind of correlation is it? Describe using the labels on the scatter plot, what the correlation means 1pt positive correlation. As height increases, weight increases.

- c.) Write the equation for the line of best fit. **Show all work.** 1pt Answers will vary, slope must be positive!
- (67, 155) (72, 220)  $y = mx + b$
- $\frac{220 - 155}{72 - 67} = 13$   $155 = 13(67) + b$
- $155 = 871 + b$   $-716 = b$   $y = 13x - 716$  See me if you aren't sure

- d.) Predict the weight of a player if they are 73 feet tall. **Show all work.** 1pt

$$y = 13(73) - 716$$

$$(233.1)$$

- 5.) Write the equation of the line perpendicular to  $-2x + 4y = 8$  and goes through the point  $(-1, 3)$  1pt

$$3 = -2(-1) + b$$

$$3 = 2 + b$$

$$1 = b$$

$$y = -2x + 1 \text{ Answer}$$

$$4y = 2x + 8$$

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

- 6.) Write the equation of the line that is parallel to  $-3x + y = 5$  and crosses the y axis 3 units below it. 1pt

$$+3x \quad +3x$$

$$y = 3x + 5$$

$$y = 3x + 2$$

$$b = 5 - 3$$

$$= 2$$