

Algebra 1

Standards: 2.2, 2.5, 2.8

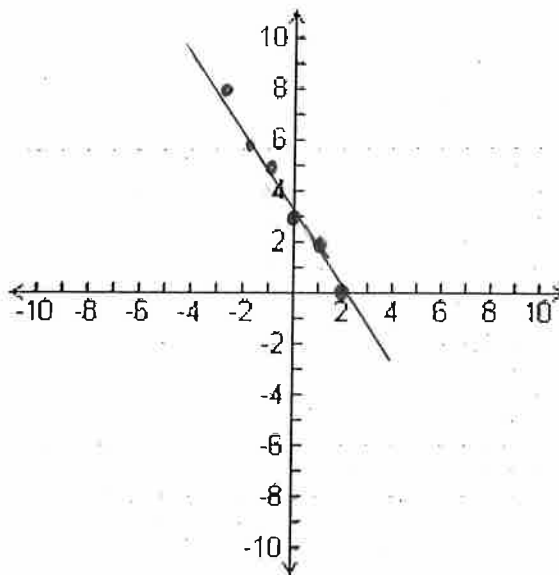
Name: Key

Homework

Pg. 296 - 297 #7, 23 - 24

7. A) Draw a scatter plot of the data.

x	y
-3	8
-2	6
-1	5
0	3
1	2
2	0

B) State whether x and y have a *positive correlation*, *negative correlation*, or *relatively no correlation*.Negative correlation

C) Use a ruler to sketch the line that you think best approximates the data points.

D) Locate two points on the line that you have drawn from step C. Approximate the x -coordinate and y -coordinate. Write those points as ordered pairs.(0, 3) (2, 0)

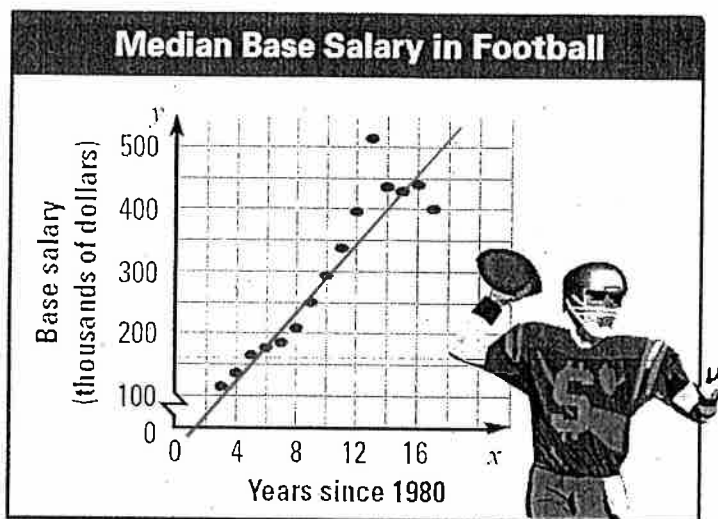
E) Use the two ordered pairs you wrote in step D to write the equation of the line that passes through the two points. Show all work below. Write your answer in slope-intercept form.

$$\frac{0-3}{2-0} = -\frac{3}{2}$$

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

Directions: In exercises 23 and 24, use the following information.

The median base salary for players in the National Football League from 1983 to 1997 is shown in the scatter plot at the right. In the scatter plot, y represents the salary and x represents the number of years since 1980.



► Source: National Football League Players Association

23. Use a ruler to sketch the line that you think best represents the data. Then write the equation of the line that you drew, showing all work here. Write your answer in slope-intercept form.

$$(14, 400) \quad (12, 350)$$

$$\frac{400 - 350}{14 - 12} = \frac{50}{2} = 25$$

$$y = 25x + b$$

$$350 = 25(12) + b$$

$$350 = 300 + b$$

$$50 = b$$

$$y = 25x + 50$$

24. Use the equation from Exercise 23 to approximate the median base salary in the year 2010. Label your answer!

$$x = 30$$

$$y = 25(30) + 50$$

$$y = 750 + 50$$

$$y = 800$$