

Worksheet on Regression Line and the Predicted Value

Complete each table using the given linear regression (round your answer to one decimal place).

1. Linear Regression Equation: $y = 0.5x$

x	y	Predicted value
5	3	
10	4	
15	9	
20	7	
25	13	
30	15	

2. Linear Regression Equation: $y = -0.4x + 16.3$

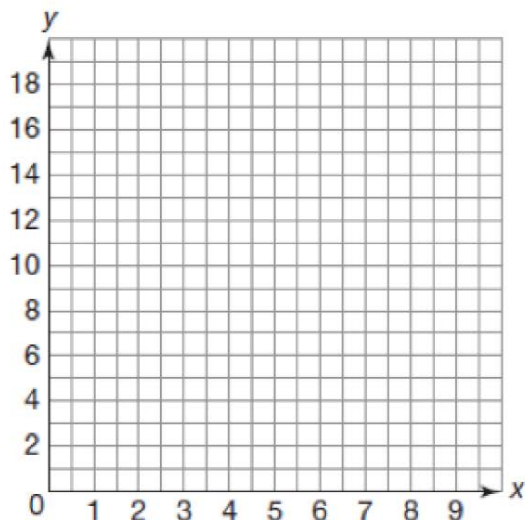
x	y	Predicted value
2	5	
4	15	
6	26	
8	23	
10	30	
12	25	

3. The table shows the percent of the United States population who did not receive needed dental care services due to cost. Let 1999 be year 0 on the x-axis.

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Percent	7.9	8.1	8.7	8.6	9.2	10.7	10.7	10.8	10.5	12.6	13.3

a. Sketch a scatter plot of the data

b. Using two point from the data estimate the equation of the line of best fit.



c. Create a Table similar to above with the actual x and y, and the predicted value given by your line of regression.