

ALGEBRA II
Chapter 2 section 6
Draw Scatter Plots and Best - Fitting Lines
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FOCUS:

How can you tell if a set of data points can be modeled by a best - fitting line?

VOCAB:

Scatter Plot: _____

Positive Correlation: _____

Negative Correlation: _____

Correlation Coefficient: _____

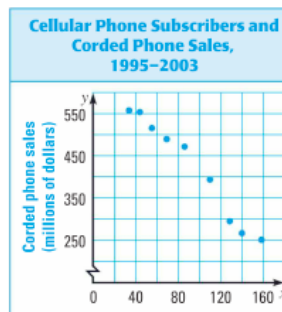
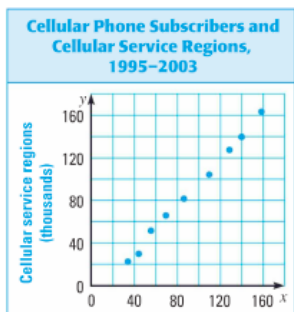
Best - Fitting Line: _____

WARM – UP:

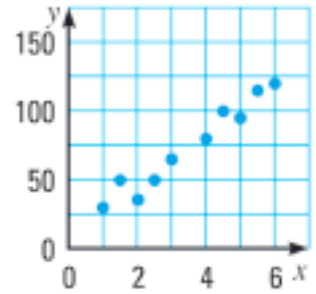
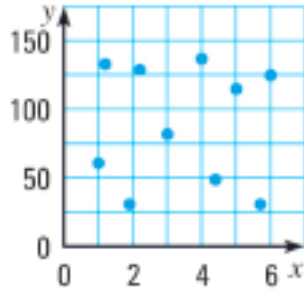
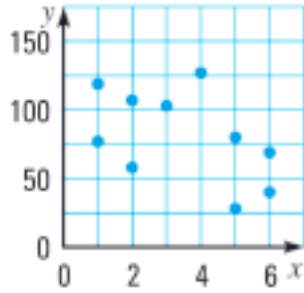
1. Find the slope of the line through (-5, 1) and (2, -6).
2. Write an equation of the line through (-2, 5) and (4, 8).
3. A line's graph has slope $\frac{2}{3}$ and contains the point (6, 1). Write an equation of the line.

NOTES:

Describe the correlation shown by each scatter plot.



Tell whether the correlation coefficient for the data is closest to -1, -0.5, 0, 0.5, or 1.



The table gives the systolic blood pressure y of patients x years old. Find the best - fitting line for the data.

x	43	48	56	61	67	70
y	128	120	135	143	141	152

Predict the systolic blood pressure of a 75 year old patient.

The table shows the U.S. daily oil production y (in thousands of barrels) x years after 1994.

x	1	2	3	4	5	6	7	8
y	6660	6560	6470	6450	6250	5820	5800	5750

Predict the daily oil production in 2009.

Let's see if you comprehended what we worked on in class...

Try _____ for homework