

Chapter 1.2 – Scatter Plots & Regression Lines

Name: _____

Standard: DSP.2

I can...

- Find a function that fits a set of data on a scatter plot (by hand and using technology)
- Use the function to make predictions
- Explain the correlation coefficient and how it changes given a set of data

Items in bold must be turned in to me.

_____ **video notes (2)**

_____ **worksheet**

_____ **Desmos Activity**

_____ extra video

_____ book assignment

_____ slope/lines worksheet

_____ pre-mc

_____ **mastery check**

Pre-MC:

1. State whether the graph below has positive, negative, or no correlation.



Algebra 2

2. Make a scatter plot, graph a line of fit, and describe the correlation for the amount of ice cream Sunee’s Homemade Ice Creams sold for eight months. Let $x=1$ for January.

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
Gallons Sold	37	44	72	80	105	110	119	131	?

- a. Write the equation for your line of fit.
- b. Use your line of fit equation to predict how many gallons they sold in September.

3. Use technology to make a scatter plot and find and write the regression equation for the data given. Sketch it below.

Class size	16	19	24	25	27	29	32
Class Average	81.2	80.5	82.5	79.9	78.6	79.3	77.7

- a. What is the correlation coefficient of the data?
- b. Interpret the slope of the regression line in relation to the data.