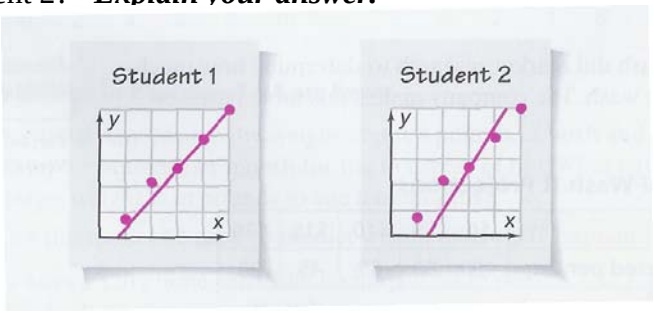
Name _____ Date _____ Hour _____

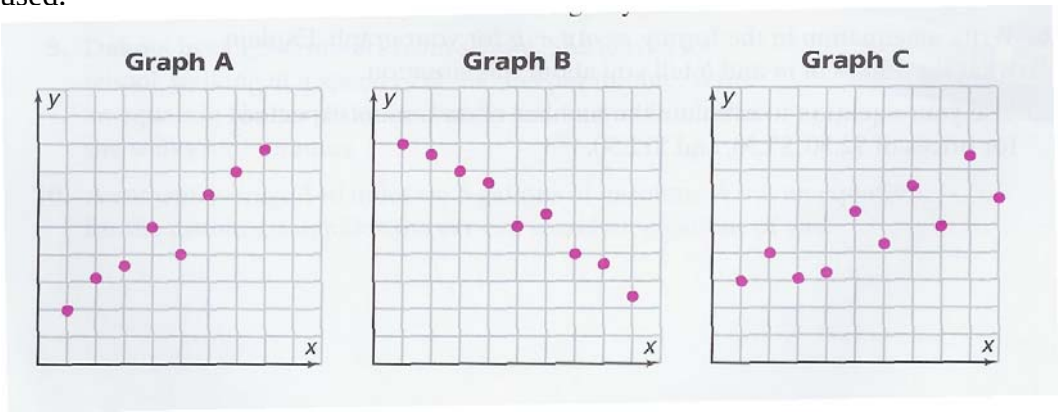
THINKING WITH MATHEMATICAL MODELS

INV 2 – ACE # 2, 3, 5 pg. 33-34

2.) The following image is provided on page 33. Which line do you think is a better model for the data—student 1 or student 2? ***Explain your answer.***



3.) For each graph below, draw a line that fits the data as closely as possible. **Describe** the strategies you used.

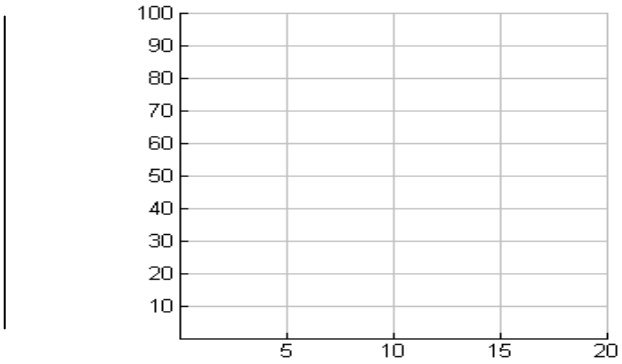


5.) U-Wash-It Car Wash did market research to determine how much to charge for a car wash. The company makes this table based on its findings. This table is also provided on page 34.

Price per Wash	$0	$5	$10	$15	$20
Customers Expected per Day	100	80	65	45	20

a) Label and graph the (*price, expected customers*) data . Draw a line that models the data pattern.

U-Wash-It Car Wash Projections



b) Write an equation in the form $y = mx + b$ for your graph. **Explain** what the values of *m* and *b* tell you about this situation.

c) Showing the steps, use your <u>equation</u> to estimate the number of customers expected for the following prices:

$2.50 $7.50 $12.50.