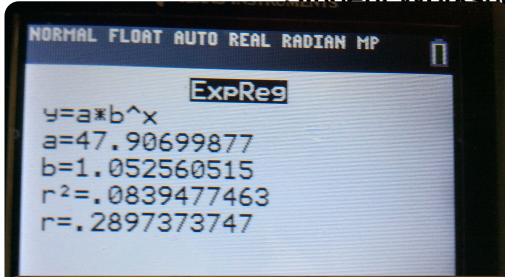


**Kevlar, How Tough Are You?**  
Student Worksheet

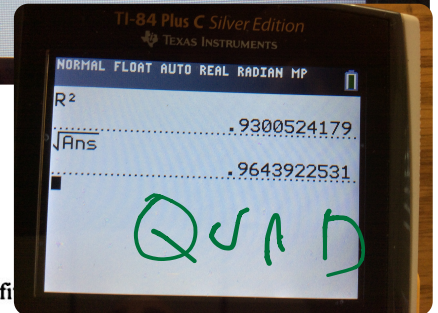
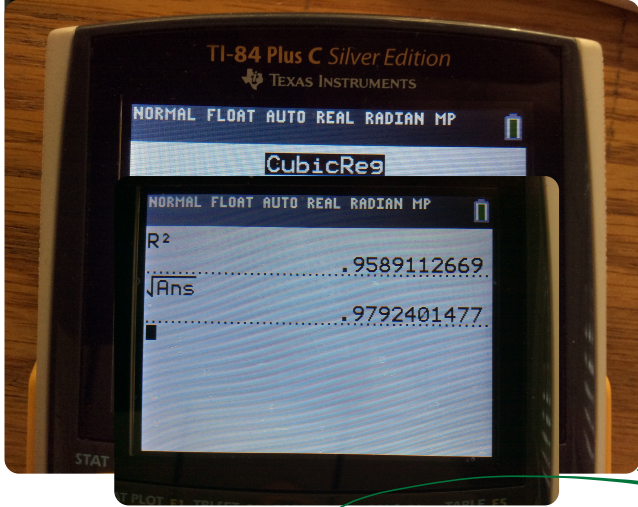
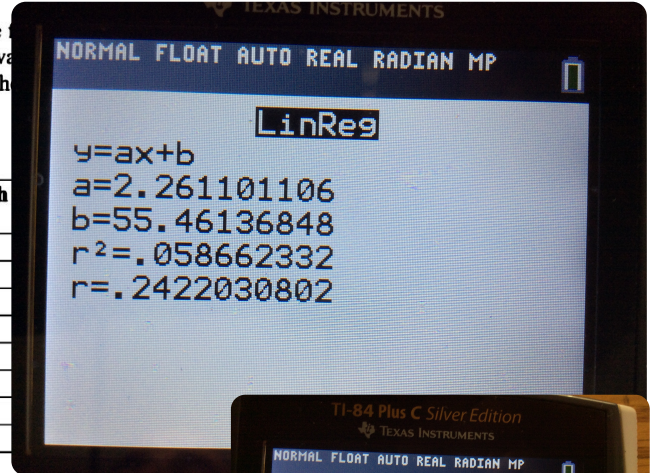
Name: \_\_\_\_\_



When exposed to strong acids and bases. The  
 exposing Kevlar for 16 hours to steam from wa  
 lower the pH, the more acidic, and the high

**Data**

pH of Water	% Breakdown Strength Remaining
	23
	40
	60
	70
	79
	81
	86
	87
	89
	88
	83
	74
	60
	43



Use the regression capabilities to determine the best-fit

a.) Find the best equation to model the data

Linear Correlation Coefficient: \_\_\_\_\_ Cubic Regression = \_\_\_\_\_

Quadratic Correlation Coefficient: \_\_\_\_\_ Exponential Regression = \_\_\_\_\_

Best Fit: Cubic

② If the percent breakdown is 53% find the pH of the water.  
 Acidic / Basic

3. Use your equation of best-fit to compute

in the breakdown.

a. the pH is 4.5

b. the pH is 6.5

