

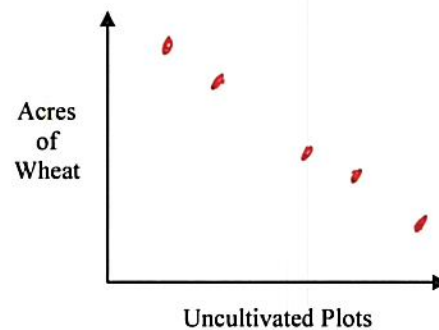
Use your graphing calculator to sketch a scatter plot of the data represented in the table below.

Uncultivated Plots	1	2	4	5	8
Acres of Wheat	225	195	155	146	75

A. To the nearest thousandth, what is the correlation coefficient? Describe the correlation.

Correlation Coefficient: -0.995

Description: Very close to -1
There is a strong, negative correlation



B. Using your graphing calculator, determine the linear regression equation. Round all values to the nearest hundredth.

Equation: $y = -20.63x + 241.73$

C. Using your equation, predict the number of whole acres that would exist if there were 7 uncultivated plots.

$$y = -20.63(7) + 241.73$$

$$y = -144.41 + 241.73$$

$$y = 97.32$$

Approximately 97 acres of wheat would exist if there were 7 uncultivated plots.

Is this an example of interpolation or extrapolation? interpolation