The Law of Variances, Correlation and Regression

Three arctic zoologists spent 5 winters in the Yukon Territory. Their hypothesis was that the number of days on which the temperature dropped below -50° Fahrenheit affected the length of moose horns. Here is their data –

X, the number of days -50 degrees or less	Y, average length of moose horns (in meters)
30	0.9
20	0.8
10	0.5
30	1.0
10	0.8

1. Does the data correlate? Explain.

2. Describe the line of linear regression and predict the average length of the moose horns for a year with 38 sub -50° days.