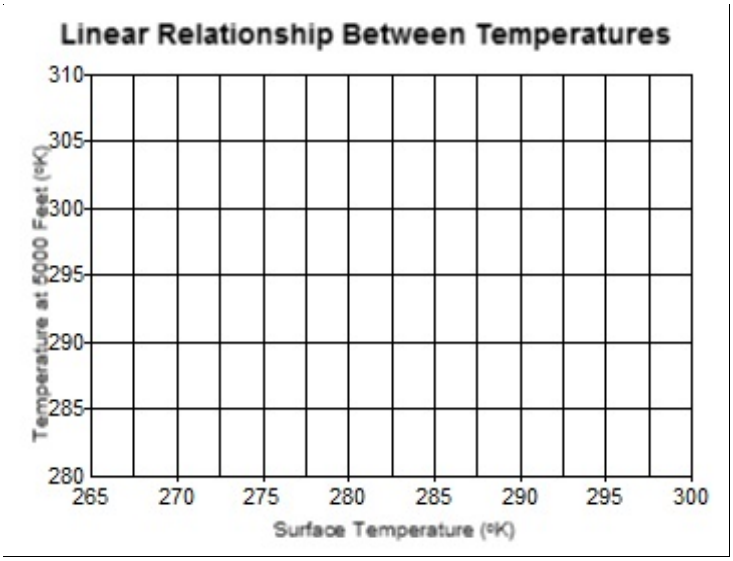
(6 points; 7 minutes)

2. Based on the data given below, do parts (a) through (d).

Observation	Temperature (°K) at 5000 feet	Surface
1	296	304
2	277	294
3	275	287
4	288	304
5	276	286
6	267	287
	(Y)	(X)



(a) Plot the data points on the graph.

(b) Enter data in calculator and write the equation for the best-fitting line: _____

(c) Plot the line on the graph.

(d) Predict the temperature at 5000 feet when the surface temperature is 280 °K?. _____

(e) What is the proportion of the variability in Y that is "explained" by the temperature at the surface? _____

(b) The expression for the total variability in Y is: _____

(c) The value of the total variability in Y is: _____

(d) The expression for the explained variability in Y is: _____

(e) The value of the explained variability in Y is: _____

(f) The expression for the unexplained variability in Y is: _____

(g) The value of the unexplained variability in Y is: _____

(h) The expression for the Standard Error of Estimate is: _____

(i) The value of the Standard Error of Estimate is: _____