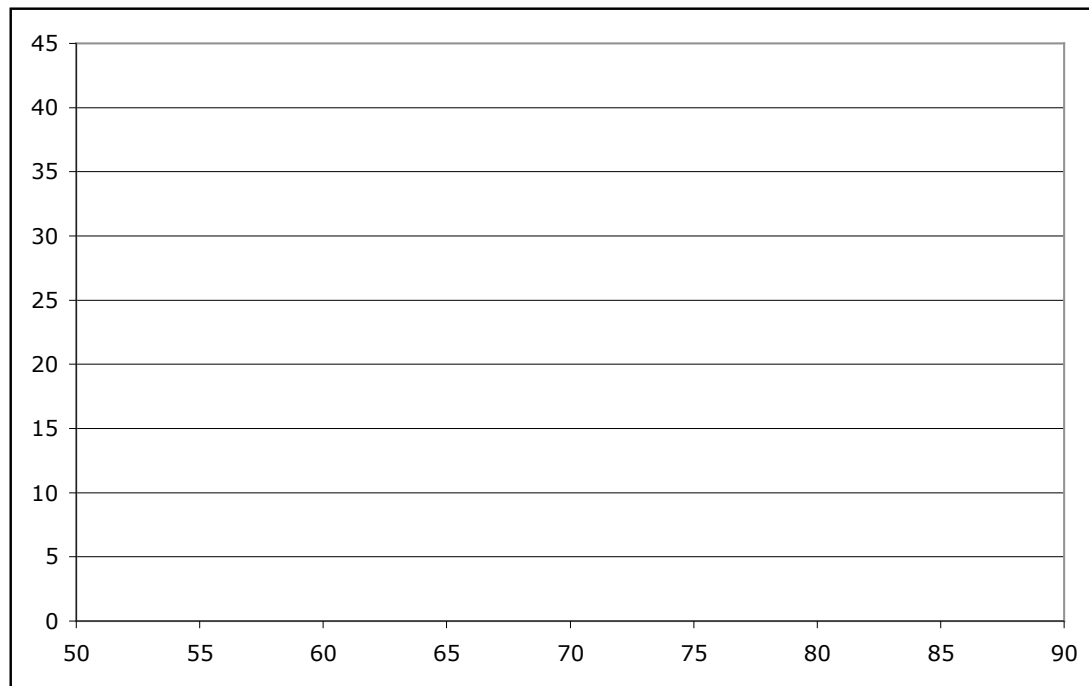


Regression Homework

A company wants to use a short test of mechanical ability to identify candidates for assembly line work. Data from past applicants that have been hired is given below. The test score (X) is then correlated with the number of parts made per hour on the line.

- a. Produce a scatterplot of the data on the graph below and plot the regression line and draw on graph
- b. report the slope and intercept and interpret them
- c. How much variability in performance on the assembly line is accounted for by the test?
- d. If the company want to hire only people who will be able to produce 30 or more parts per hour in the future, what is the minimum test score the applicant would need?

X	Y
84	36
81	41
80	38
77	30
75	31
73	28
73	32
72	23
72	26
71	20
71	29
70	33
69	26
68	18
67	34
65	19
64	36
63	25
62	28
60	22



Mean of X _____ Stdev= _____

Mean of Y _____ Stdev= _____

r= _____

r²= _____

b= _____

a= _____