

## Assignment 1

The following data indicate the relationship between the amount of  $\beta$ -erythroidine in an aqueous solution and the colorimeter reading of the turbidity:

X	Y
Concentration (mg/mL)	Colorimeter Reading
40	69
50	175
60	272
70	335
80	490
90	415
40	72
60	265
80	492
50	180

(a) Fit a simple regression to the data.

(b) Comments on the model adequacy using  $F$  test and  $R^2$  statistics.