

MAT: 3312 Homework assignment 6 (Regression Analysis)

Name: _____ Date: _____

The table below is from a sample of SBP of kids who are average height.

Age (x)	SBP ^a (y)	Age (x)	SBP ^a (y)
1	99	10	115
2	102	11	117
3	105	12	120
4	107	13	122
5	108	14	125
6	110	15	127
7	111	16	130
8	112	17	132
9	114		

Input the data above into SAS.

Question 1. Run a linear regression model to determine relating age to Systolic Blood Pressure. Paste output here (Analysis of Variance and Parameter estimate tables).

Question 2. Provide an interpretation of the parameter estimate for age.

Question 3. Provide an interpretation of the parameter estimate for the intercept.

Question 2. Test for the statistical significance of this regression line using the F test. What is the F-test statistics?

Question 3. What is the p-value from the F-test statistics?

Question 4. What is the conclusion for based on the p-value from the F test?

Question 5. Test for the statistical significance of the regression line using the t-test. What is the t-test statistics?

Question 6. What is the p-value from the t-test statistics?

Question 7. What is the conclusion for based on the p-value from the t test?

Paste code here.