Verbal	0.00362
T-Value	5.49
P-Value	0.000
S	0.499
R-Sq	23.50
R-Sq(adj)	22.72
C-p	1.0

From the previous output answer the following, with justification;

a. Find the regression LSE's. $b_0 = 0.47$, $b_1 = 0.00356$, $b_2 = 0.000158$

b. Witch one of the indep. Variables significant? The Verbal ($p = 0 < 0.05$)

c. Is the over all model significant in predicting the value of the GPA.

Yes, because Using F-test gives $P = 0 < 0.05$

d. What is the percentage of variation in GPA is explained by the variation in the independent varial

$R^2 = 23.5\%$

e. What is the best subset of the independent variables to be used?

The best subset is ONLY the verbal (highest R^2-adj = 22.7%, lowest $S_\epsilon = 23.5$)

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Constant	0.5386
Verbal	0.00362
T-Value	5.49
P-Value	0.000
S	0.499
R-Sq	23.50
R-Sq(adj)	22.72
C-p	1.0

From the previous output answer the following, with justification;

a. Find the standard error of the model. 0.5018

b. Is there any colinearity exists between any of the independent variables? NO (VIF = 1.2 < 5)

c. What is a 95% CI for the average GPA for student with Verbal=Math=600? (2.567, 2.8387)

d. If we started by the Verbal only then the Math was added, do you think that the model will be improved?

NO, because R^2-adj by adding Math is 4 only.

e. If a new variable for the Gender was added to the model, what do you think that the value of the coefficient of determination will be? R^2 will definitely increase.

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