

Assignment:

Testing Multiple Regression: _____

Print your name

Use the regression model from the previous assignment, "Point Estimates from Multiple Regression" to answer the following questions.

Attach the printout (same printout as in the previous assignment if that was correct, otherwise a corrected one) and answer the following questions in the blanks provided.

For extra credit, also attach a corresponding SPSS or SAS printout

Important: Write numbers, not words, symbols or formulas, in all blanks

1. The least squares estimate of JOBSAT is

$\widehat{JOBSAT} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} * EDUCATION + \underline{\hspace{2cm}} * SALARY$
(If this was correct in the previous assignment, it will be the same numbers here)

2. The numeric value of the F statistic for testing

$H_0 : \beta_1 = \beta_2 = 0$ against $H_1 : \beta_1$ or β_2 or both $\neq 0$ is _____

3. We take only a 5% Type I risk in saying that

β_1 or β_2 or both $\neq 0$ if F is above what number? _____

4. Without considering degrees of freedom, what percent of the

uncertainty about job satisfaction is explained by education and salary? _____%

5. Taking degrees of freedom into consideration, what percent of

the uncertainty about job satisfaction is explained by education and salary? _____%

6. Test $H_0 : \beta_1 = 0$ against $H_1 : \beta_1 > 0$ at the 5% significance level

Calculated t = _____ Rejection point = _____ Reject H_0 in favor of H_1 ? Yes No
circle one

7. Test $H_0 : \beta_2 = 0$ against $H_1 : \beta_2 \neq 0$ at the 5% significance level

Calculated t = _____ Rejection point = _____ Reject H_0 in favor of H_1 ? Yes No
circle one

7. We can be 95% confident that _____ $\leq \beta_1 \leq$ _____

Important: Write numbers, not words, symbols or formulas, in all blanks