First Exam Review

1. What are:

\[ \bar{X} = \]

\[ \bar{Y} = \]

\[ S_{xx} = \]

\[ \text{MSE} = \]

\[ b_0 = \]

\[ b_1 = \]

\[ n = \]

2. From the output, what is the fitted model?
3. Test whether “numbers” is a useful linear predictor of “time”.

4. In ANOVA, find and interpret:

\[ \text{SSTO} = \]

\[ \text{SSR} = \]
SSE =

5. How do we conduct the ANOVA F test? What is it testing?
6. Find and interpret $R^2$.

7. Predict $Y_h$ at $X=3$ and find a 95% prediction interval.
8. Find a point estimate and a 90% confidence interval for $\beta_0$. 