## Answer Sheet for Lab \#7: Simple Linear Regression

Name: $\qquad$

Use your results from the Exercise portion of the lab to answer the following questions.

1. What is the estimated regression equation: $\hat{y}_{i}=b_{0}+b_{1} x_{i}$ ?
2. What is the interpretation of $b_{1}$ ?
3. What is the standard error associated with the estimated slope coefficient, $b_{1}$ ?
4. What is the $t$-stat and $p$-value associated with the estimated slope coefficient, $b_{1}$ ? Is the $x$ variable a statistically significant predictor of $y$ at the $5 \%$ significance level? At the $1 \%$ significance level?
5. What is the total sum of squares, the explained sum of squares, the unexplained sum of squares, and the R-squared?

TSS =
ESS =
USS =
$\mathrm{R}-\mathrm{sq}=$

