Assignment: Reading SAS printouts

Fill in the answers to the following exercises (both pages) using the SAS printouts in the book. Do not re-work the problems with a computer; the answers are there with at most a very small amount of simple arithmetic or a reference to an Excel function (or a table), and in most cases not even that!

3.7 a: Value of $b_0$: ________ Interpretation:

Value of $b_1$: ________ Interpretation:

Does the interpretation of $b_0$ make practical sense?

3.7 b. point estimate of the mean time to service 4 copiers: ________

point prediction of the time to service 4 copiers on the next call: ________

Do not do 3.7c

3.21 a. Point estimate: __________ lower bound: __________ upper bound: __________

3.21 b. Point prediction: __________ lower bound: __________ upper bound: __________

3.21c: allow _______ minutes

3.25 a. Total Variation: ________ Unexplained Variation ________ Explained Variation ________

Coefficient of determination: ______ Correlation Coefficient ______

Interpretation of $r^2$

3.25 value of $b$. t-statistic based on $r$: ________ Critical t for .05 ; ________ Critical t for .01: ________

Results and interpretation of hypothesis tests:

3.29 a, F-statistic: __________

3.29 b. Critical value of F: __________ Conclusion:

3.29 c. Critical value of F: __________ Conclusion:

3.29 d. p-value: __________ Conclusions:

3.29 e. t-statistic: ________ square of t-statistic: ________

Critical value of t: ________ square of critical value of t: ________
Reading SAS printouts (page 2)

4.14 a. (discussion):

4.14 b. 1. Point estimate: ___________  lower bound: ___________  upper bound: ___________

4.14 b 2. Point prediction: ___________  lower bound: ___________  upper bound: ___________

4.17 Point prediction of total profit: $___________  lower bound: $__________  upper bound: $__________  
(Note "Observation 19" is x₁ = 4.8 and x₂ = 6. Give answers in dollars and cents, not percents!)

Interpretation:

4.18 a, b, c. You don't have to do these; use the graph at right.

4.18 d x* = ___________

Which of the three groups should get projects with size < x*? ___________________

Which of the three groups should get projects with size > x*? ___________________

What should the other group get? ___________________

6.4 a & b. Skip

6.4 c On a separate sheet, answer sub-parts 1, 2, 3, 4, and 5. Label your answers very clearly.

6.4 d On another separate sheet (not the one with answers to part c), answer sub-parts 1, 2, 3, and 4. Skip sub-part 5. For sub-part 6.4.d.3, give confidence intervals, not the prediction intervals the book asks for. Label your answers very clearly.