Section 1 (graded) from Devore, 7th edition:

Exercises

$$12.2.20a., b.c.$$

Use the R commands given in the ungraded section to compute the answers and include the output in your hw. Otherwise, you can do the calculation by hand and show each step.

12.2.25, 12.2.26 interpret this result , 12.2.27, 12.2.28, 12.2.29, 12.81, 12.83

```
> x<-c(20,40,60,80)
> y<-c(.24, 1.20, 1.71, 2.22)
> z<-lm(y~x)
> summary(z)

Call:
lm(formula = y ~ x)

Residuals:
      1       2       3       4
-0.135   0.180   0.045  -0.090

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) -0.270000   0.213454  -1.265   0.3333
x            0.032250   0.003897   8.275   0.0143 *
---
Signif. codes:  0 *** 0.001 ** 0.01 * 0.05 . 0.1   1

Residual standard error: 0.1743 on 2 degrees of freedom
Multiple R-Squared: 0.9716,      Adjusted R-squared: 0.9574
```

```
F-statistic: 68.48 on 1 and 2 DF,  p-value: 0.01429
```

The above code was run in R. Interpret the output as much as you can from what we have covered in class. Guess and then interpret what the other outputs means.