Wilf Csaplar Jr. Economics 280 Homework #4 Due 02/22

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to follow these directions will cost you 1 point on the assignment and failure to type it will cost you 10 points.

Regression Statistics

Multiple R	0.39761
R Square	0.15809
Adjusted R Square	0.14074
Standard Error	138.584
Observations	100

Analysis of Variance

	df	*Sum of Squares*	*Mean Square*	*F*	*Significance F*
Regression	2	349841.7	174920.8	9.10772	0.000237
Residual	97	1862959	19205.76		
Total	99	2212800			

	Coefficients	*Standard Error*	*t Statistic*	*P-value*	*Lower 95.00*	*Upper 95.00*
Intercept	-69.7648	118.8798	-0.58685	0.5586	-305.704	166.178
Price X	-1.4168	0.9841	-1.43969	0.1531	-3.370	0.536
Income	0.0114	0.0027	4.22222	0.0001	0.006	0.016
Price Y	0.1242	0.0425	2.92203	0.0043	0.039	0.209

Use the regression results above to answer these questions. For the questions which require the regressions to give good results, assume they are good results even if they are not. **Explain how you determined each answer.**

1) (10 points) What is the equation which this regression predicts?
2) (15 points) If your income was $20,000.00, the price of X is $3/unit, and the price of Y is $4/unit, how much would expect that you would buy?
3) (10 points) What is the income elasticity of demand at the volume of sales in question #2? What does that tell us?
4) (10 points) What is the own-price elasticity of demand at the volume of sales in question #2? What does that tell us?
5) (10 points) What is the cross-price elasticity of demand at the volume of sales in question #2? What does that tell us?
6) (15 points) Which variables are significant?
7) (10 points) Is the regression a good one for predicting the sales?

8) (20 points) If you were going to design a new car, how would you go about determining the demand for the car? Explain your logic.