

<b>HOMEWORK ASSIGNMENT 4</b>		Assigned: October 20, 2005
		Due: October 27, 2005
		10 Points – 1 point each day late

<p><b>Complete the following questions from your textbook. The problems come from the "Patient satisfaction" example. Hospital administrators are examining the relationship between patient satisfaction (Y, the first variable) and patient age (X1), severity of illness (X2) and anxiety level (X3). The data is in dataset "<a href="http://www.stat.lsu.edu/EXSTWeb/statlab/datasets/nknwdata/CH06PR15.txt">http://www.stat.lsu.edu/EXSTWeb/statlab/datasets/nknwdata/CH06PR15.txt</a>".</b></p>	
1) 7.5	<b>Both parts (a &amp; b)</b>
2) 7.6	<b>Just the test P-value and conclusions</b>
3) 7.9	<b>Just the full and reduced models, P-value for the and conclusions</b>
3) 7.14 modified	<p>1) Fit <math>r^2_{Y,X1}</math>, <math>r^2_{Y,X1 X2}</math> and <math>r^2_{Y,X1 X2 X3}</math>. Comment on the how the <math>r^2</math> value changes as additional variables enter the model.</p> <p>2) Fit <math>r^2_{Y,X2}</math>, <math>r^2_{Y,X2 X1}</math> and <math>r^2_{Y,X2 X1 X3}</math>. Are the results similar?</p>
4)	<b>Obtain and interpret the standardized regression coefficients.</b>
5)	<b>Obtain and interpret the Variance Inflation Factors (VIF)</b>