## Fin 5413: Chapter 8 Problem - How much house do I qualify for? <br> Remember to show your work!

You currently earn \$48,000 per year and have stellar credit. You have saved \$16,000 that can be used for down payment and closing costs (you can use any excess cash you have to make a larger down payment than your loan requires). You have a car loan with payments of $\$ 375$ per month, and no other debts. Closing costs, excluding points on the loan are expected to run $2 \%$ of the loan amount.

Annual Property taxes will be $2.5 \%$ of the value of the house
Annual Hazard insurance will be $0.75 \%$ of the value of the house
Loan rates are ( 30 year term) (PMI is built into the loan rates):
80\% LTV - $6.5 \%$ with one point
$90 \%$ LTV - $6.75 \%$ with two points
$95 \%$ LTV $-7.25 \%$ with one point
What is the maximum amount you can pay for a house (to the nearest $\$ 10,000$ ) using each of the 3 loan alternatives. You may want to set this up on a spreadsheet as its takes trial and error (or goal seeking) calculations. You need to check:

1. You have to have enough cash to close the loan
2. You have to qualify for the monthly payments under the 28/36 (front end/back end ratio) guidelines.

Or, if you prefer:
Show that the maximum house you can afford is:
If you want an $80 \%$ loan, the maximum house you can afford is: $\$ 71,425$.
If you want a $90 \%$ loan, the maximum house you can afford is: $\$ 117,645$. If you want a $95 \%$ loan, the maximum house you can afford is: $\$ 120,410$.

Show what constrains you to these amounts.

