

Writing Assignment #3

Cory and Tisha have a total household gross monthly income of \$7,000 and monthly debt repayment of \$911, what is the maximum mortgage loan amount for which Cory and Tish could qualify? Monthly real estate taxes and homeowner's insurance together are estimated to be \$170 per month. Use 4 percent as the current rate of interest and assume a 30-year, fixed rate mortgage.

- 1. Explain the 28 percent rule, and calculate the mortgage loan amount under the 28 percent rule.**

The 28 percent rule means that no more than 28% of your gross monthly income can be used to pay housing-related expenses, otherwise known as your PITI. PITI stands for principal, interest, taxes (real estate), and insurance. There are multiple steps to the 28% rule. First, one must find the PITI limit. This is done by multiplying your monthly income by 28 percent. In Cory and Tisha's case, their monthly income is \$7,000, so their PITI limit equals \$1,960. Second, one must find the maximum monthly mortgage payment. This is solved by taking the PITI limit and subtracting taxes and insurance which, in this case, equal \$170 per month. Therefore, the monthly mortgage payment is \$1,790. Lastly, you are able to calculate the maximum loan amount using the 28% rule. To do this, the interest rate (I/Y) is 4 percent divided by 12 (0.333), the time period (N) is 30 years multiplied by 12 (360 months), and your payment (PMT) is \$1,790. Then, you compute for the present value, which doubles as the maximum loan amount, and the monetary amount is \$374,935.62.

- 2. Explain the 36 percent rule, and calculate the mortgage loan amount under the 36 percent rule.**

The 36 percent rule means that no more than 36% of your gross monthly income can be used to pay housing-related expenses, otherwise known as your PITI. The steps to the 36% rule are the same as the 28% rule, however, 36% is substituted for 28 percent. First, the PITI limit is \$7,000 multiplied by 36%, which equals \$2,520. The maximum monthly mortgage payment is different than in the 28% rule because you have to add the \$911 repayment debt to the \$170 taxes and insurance prior to subtracting it from the PITI limit. Therefore, \$1,081 is subtracted from \$2,520 for a total of \$1,439 as the maximum monthly mortgage payment. From there, the interest rate and time period are the same as the 28% rule, but the payment is \$1,439 instead of \$1,790. Once you compute for present value, you'll find the mortgage loan amount to be \$301,414.73.

- 3. What other information would be necessary or useful to help Cory and Tisha determine the appropriate loan amount?**

The terms of the loan contract would be helpful to know so they're not in danger of making insufficient payments or violating their loan agreement. It's also useful to know the one-time costs, such as the down-payment and closing/settlement costs, and the recurring costs, such as the monthly mortgage payments and PITI (which we've already figured out for Cory and Tisha). Also, in order to figure out the maximum amount that a bank will lend them, Cory and Tisha's credit score as well as their income and the appraised value of the home comes into play.

