

Example 2

Mr. Orange would like to apply for a mortgage to purchase a new home valued at \$400,000. Mr. Orange has stated that the property taxes are \$2,900 per year. His income is \$73,000 per year. Further investigation shows that Mr. Orange has a car payment of \$275 per month, credit card payments of \$195 per month and a loan payment of \$300 per month.

a) What is the maximum monthly mortgage payment for which Mr. Orange qualifies based on a TDS of 44%?

b) What is the maximum loan amount for which Mr. Orange qualifies based on an interest rate of 6% compounded semi-annually, not in advance, and a 25-year amortization?

Solution

a) For the sake of simplicity in this example the annual property taxes and annual income will be divided by twelve to determine the monthly amount and all other debts will be kept monthly. Heat is standardized at \$100 per month.

$$\text{Maximum Mortgage Payment (MMP)} = \text{Income} \times (\text{MAX TDS} / 100) - (\text{Property Taxes} + \frac{1}{2} \text{ Condominium Maintenance Fee} + \text{Other Debts})$$

$$\text{MMP} = [(\$73,000 / 12) \times (44\% / 100)] - (\$2,900 / 12) - \$100 (\text{heat}) - \$275 - \$195 - \$300$$

$$\text{MMP} = (\$6,083.33 \times .44) - \$241.67 - \$100 - \$275 - \$195 - \$300$$

$$\text{MMP} = \$2,676.67 - \$241.67 - \$100 - \$275 - \$195 - \$300$$

$$\text{MMP} = \$1,565.00$$

Therefore, the maximum monthly mortgage payment for which Mr. Orange qualifies is \$1,565.00