What Can You Afford to Pay for Your New Home?

This worksheet shows how to work out manually how much you can afford, i.e. the amount of the mortgage loan you qualify for, and the price range of homes you should be a looking at. For quick and easy answers, you can also use the online mortgage calculator.

Step One: Calculate the maximum monthly payment you can afford

Most lenders recommend that you use no more than 32% of gross income on your monthly payments to cover principal, interest, property taxes and heating costs (PITH). This is called the Gross Debt Service ratio (GDS).

Gross household income is the total salary, wages, commissions and other assured income, before deductions, by all household members who are co-applicants for the loan.

Gross annual income, first applicant Gross annual income, co-applicant Other annual income	\$ \$ \$	
Total gross annual income Total monthly income (divide annual income by 12)	\$ \$	
= your maximum monthly payment for mortgage debt (principal and interest),	\$	x 32%
property taxes, heating costs)		

You should also be aware of the Total Debt Service ratio, which stipulates that no more than 40% of your gross income can go toward your total debt load, including your mortgage and all other loan payments. Lenders will use the lower of the GDS or TDS numbers.

Total Debt Service Ratio (TDS)

Gross Debt Service Ratio (GDS)

Total monthly income	\$	
= maximum monthly debt service load	\$	x 40%
less		
Monthly car payment Monthly credit card payment Other payments (e.g. student loans)	\$ \$ \$	
= monthly income left for housing as above	\$	

Step Two: Calculate the size of the mortgage loan your payment will handle

Once you have worked out how much you can afford in monthly payments, you can determine the maximum amount of the mortgage loan that you qualify for.

Subtract the estimated property taxes and heating costs from the total maximum monthly payment. Your builder or lender can advise you on appropriate numbers. The remaining sum is what you have available for the principal and interest.

Example		Your figures here
Maximum monthly payment (PITH)	\$1,500	
Less estimated monthly taxes and heating	<u>375</u>	
Available for principal and interest	\$1,125	

The amount of the mortgage loan that can be serviced with the amount you have available depends on the interest rate at the time—the lower the interest rate, the higher the amount you can borrow. Through a formula using this amount and monthly mortgage factors below, you can calculate the exact amount of the mortgage you can borrow.

Monthly payment factors represent the monthly payment required to repay a loan of \$1,000 at a given rate over a specific amortization period.

Example

At a 6% interest rate, it takes \$6.40 per month to repay a \$1,000 mortgage over 25 years. This means that if a borrower with \$1,125 available for principal and interest can obtain a mortgage with a 6% interest rate, the amount of this mortgage is as follows:

 $(\$1,125 \div 6.40) \times \$1,000 = \$175,781.25$

Check with your bank or other financial institution for the current interest rates. Then *CALCULATE YOUR MORTGAGE LOAN HERE:*

Note to Webmaster: Allow blank space here for printed version

Step Three: Calculate the price range of your home here

Add your downpayment to the calculated mortgage amount and you will have a good idea of the price range of the homes that you should be looking at. Remember that a minimum of 5% of the purchase price is required for a down payment, and don't forget to consider the <u>additional costs</u> related to your home purchase—1.5% to 3% of the total cost. Keep in mind that you can use <u>RRSP savings</u> towards a downpayment and associated costs, up to \$20,000.

PRICE RANGE OF YOUR NEW HOME	Φ
Mortgage loan	\$
Downpayment	\$

Monthly Payment Factors

Below is a listing of basic monthly mortgage payments per \$1,000, which include principal and interest for various amortization periods. The calculation is simple. Select an interest rate and amortization period and determine the factor. Divide the monthly payment amount available (for principal and interest only) by the factor and multiply by 1,000.

Example

Interest rate: 6% Amortization: 20 years

Monthly payment available: \$950

Mortgage amount: $$950 \div 7.12x \ 1,000 = $133,427$

<u>Alternatively</u>, when you know the mortgage loan amount and want to know the monthly payment, calculate the following way: $$133,427 \div 1,000 \times 7.12 = 950 .

Interest rate	10 years	15 years	20 years	25 years
5.00	10.58	7.88	6.57	5.82
5.25	10.70	8.01	6.71	5.96
5.50	10.82	8.14	6.84	6.10
5.75	10.94	8.27	6.98	6.25
6.00	11.07	8.40	7.12	6.40
6.25	11.19	8.53	7.26	6.55
6.50	11.32	8.67	7.41	6.70
6.75	11.44	8.80	7.55	6.86
7.00	11.56	8.94	7.70	7.01
7.25	11.69	9.07	7.84	7.16
7.50	11.82	9.21	7.99	7.01
7.75	11.94	9.35	8.14	7.48
8.00	12.07	9.49	8.29	7.64
8.25	12.20	9.63	8.44	7.80
8.50	12.33	9.77	8.59	7.96
8.75	12.45	9.91	8.74	8.12
9.00	12.58	10.05	8.90	8.28
9.25	12.71	10.19	9.05	8.45
9.50	12.84	10.34	9.21	8.62
9.75	12.98	10.48	9.36	8.78
10.00	13.11	10.63	9.52	8.95