

Mortgage Formulas

Mortgage Principal

Mortgage principal = purchase price – down payment

Equity

Equity = down payment + all principal payments

Monthly Payment

Monthly payment = $\frac{\text{mortgage principal}}{1000} \times \text{amount paid per thousand dollars}$

Interest Portion of Monthly Payment

The interest portion of the monthly payment = outstanding balance $\times \frac{\text{interest rate}}{12 \text{ months}}$

Principal Portion of Monthly Payment

The principal portion of the monthly payment =
monthly payment – monthly interest portion

New Outstanding Balance

The new outstanding balance = previous month's balance – principal paid

Total Amount Paid

Total amount paid = monthly instalment $\times 12 \text{ months} \times \text{mortgage term in years}$

Total Interest Paid

The total interest paid = total amount paid – mortgage principal

Amortization Table					
Monthly payment (principal and interest) per \$1000 of loan					
Interest Rate	5 years	10 years	15 years	20 years	25 years
1.50%	\$17.31	\$8.98	\$6.21	\$4.82	\$4.00
1.75%	\$17.42	\$9.09	\$6.32	\$4.94	\$4.11
2.00%	\$17.52	\$9.20	\$6.43	\$5.05	\$4.23
2.25%	\$17.63	\$9.31	\$6.55	\$5.17	\$4.36
2.50%	\$17.74	\$9.42	\$6.66	\$5.29	\$4.48
2.75%	\$17.85	\$9.53	\$6.78	\$5.41	\$4.61
3.00%	\$17.96	\$9.65	\$6.90	\$5.54	\$4.73
3.25%	\$18.07	\$9.76	\$7.02	\$5.66	\$4.86
3.50%	\$18.18	\$9.88	\$7.14	\$5.79	\$4.99
3.75%	\$18.29	\$9.99	\$7.26	\$5.91	\$5.13
4.00%	\$18.40	\$10.11	\$7.38	\$6.04	\$5.26
4.25%	\$18.51	\$10.23	\$7.50	\$6.17	\$5.40
4.50%	\$18.62	\$10.34	\$7.63	\$6.30	\$5.53
4.75%	\$18.74	\$10.46	\$7.75	\$6.44	\$5.67
5.00%	\$18.85	\$10.58	\$7.88	\$6.57	\$5.82
5.25%	\$18.96	\$10.70	\$8.01	\$6.71	\$5.96
5.50%	\$19.07	\$10.82	\$8.14	\$6.84	\$6.10
5.75%	\$19.19	\$10.94	\$8.27	\$6.98	\$6.25
6.00%	\$19.30	\$11.07	\$8.40	\$7.12	\$6.40
6.25%	\$19.41	\$11.19	\$8.53	\$7.26	\$6.55
6.50%	\$19.53	\$11.31	\$8.66	\$7.41	\$6.70
6.75%	\$19.64	\$11.43	\$8.80	\$7.55	\$6.85
7.00%	\$19.75	\$11.56	\$8.93	\$7.70	\$7.00
7.25%	\$19.87	\$11.68	\$9.07	\$7.84	\$7.16
7.50%	\$19.98	\$11.81	\$9.21	\$7.99	\$7.32
7.75%	\$20.10	\$11.94	\$9.34	\$8.13	\$7.47
8.00%	\$20.21	\$12.06	\$9.48	\$8.28	\$7.63
8.25%	\$20.33	\$12.19	\$9.62	\$8.43	\$7.79
8.50%	\$20.45	\$12.32	\$9.76	\$8.59	\$7.95
8.75%	\$20.56	\$12.45	\$9.90	\$8.74	\$8.12
9.00%	\$20.68	\$12.58	\$10.05	\$8.89	\$8.28
9.25%	\$20.80	\$12.71	\$10.19	\$9.05	\$8.44
9.50%	\$20.91	\$12.84	\$10.33	\$9.20	\$8.61
9.75%	\$21.03	\$12.97	\$10.48	\$9.36	\$8.78
10.00%	\$21.15	\$13.10	\$10.62	\$9.52	\$8.94
10.25%	\$21.27	\$13.24	\$10.77	\$9.68	\$9.11
10.50%	\$21.38	\$13.37	\$10.92	\$9.84	\$9.28
10.75%	\$21.50	\$13.50	\$11.06	\$9.99	\$9.45
11.00%	\$21.62	\$13.64	\$11.21	\$10.16	\$9.63

* Interest is compounded semi-annually. The monthly mortgage payment amount may vary slightly.