



2/28/2007

Initial Setup

Set Periods per Year

12 [gold] [P/YR] for monthly calculation, or
1 [gold] [P/YR] for annual calculation

Clear All Registers of Prior Data

[gold] [C ALL]

Financial Registers

Top Row of Calculator

[N] Number of periods--payments

[I/YR] Annual Interest Rate—or yield

[PV] Present Value—or present worth

[PMT] Payments—made or received

[FV] Future Value--after a certain payment

Determining Mortgage Payment

(set calculator for 12 periods per year)

\$100,000 loan for 30 years with monthly payments bearing interest at the rate of 5.95% per year

100000 [+/-] [PV]

30 [gold] [N]

5.95 [I/YR]

[PMT] 596.34

[gold] [=] 9 [gold] [=] 2 [gold] [RND]

Amortization of the Loan

(Keep data in calculator from previous problem with payment on the display and press **[gold]** **[RND]**)

1 **[INPUT]** 12 **[gold]** **[AMORT]**

[=] 1,239.52 (principal paid in first 12 payments)

[=] 5,916.56 (interest paid in first 12 payments)

[=] <98,760.48> (principal balance after 12
payments)

[gold] **[AMORT]** (sets up payments 13-24) etc.

Discounting a Loan

Retain same problem in calculator—100000 [PV] 30 [gold] [N]
5.95 [I/YR] [PMT] <\$596.34> and seek present value for investor who requires an
annual yield of 10% and an annual yield of 15%

10 [I/YR]
[PV] <67,953.40>

or

15 [I/YR]
[PV] <47,162.21>

Calculating Appreciation

\$500,000 house held for 6 years in a market that appreciates on average 12% per year over a 6 year holding

[gold] [C ALL] 1 [gold] [P/YR] (to give an annual yield)

[+/-] <500000> [PV]

6 [gold] [N]

12 [I/YR]

[FV] 986,911.34

Calculating IRR (uneven cash flows)

- An investor acquired a property with \$100,00 up front and the cash flow after tax was \$5,000 EOY 1; \$9,000 EOY 2; **<\$12,000>** EOY 3; \$18,000 EOY 4; \$13,000 EOY 5 PLUS a lump sum after tax from sales proceeds of \$115,000.
- [gold] [C ALL] 1 [gold] [P/YR] (to give an annual yield)

100000 [+/-] [CFj] 5000 [CFj] 9000 [CFj]
12000 [+/-] [CFj] 18000 [CFj] 13000 [+]
115000 [=] [CFj] [gold] [IRR/Yr]