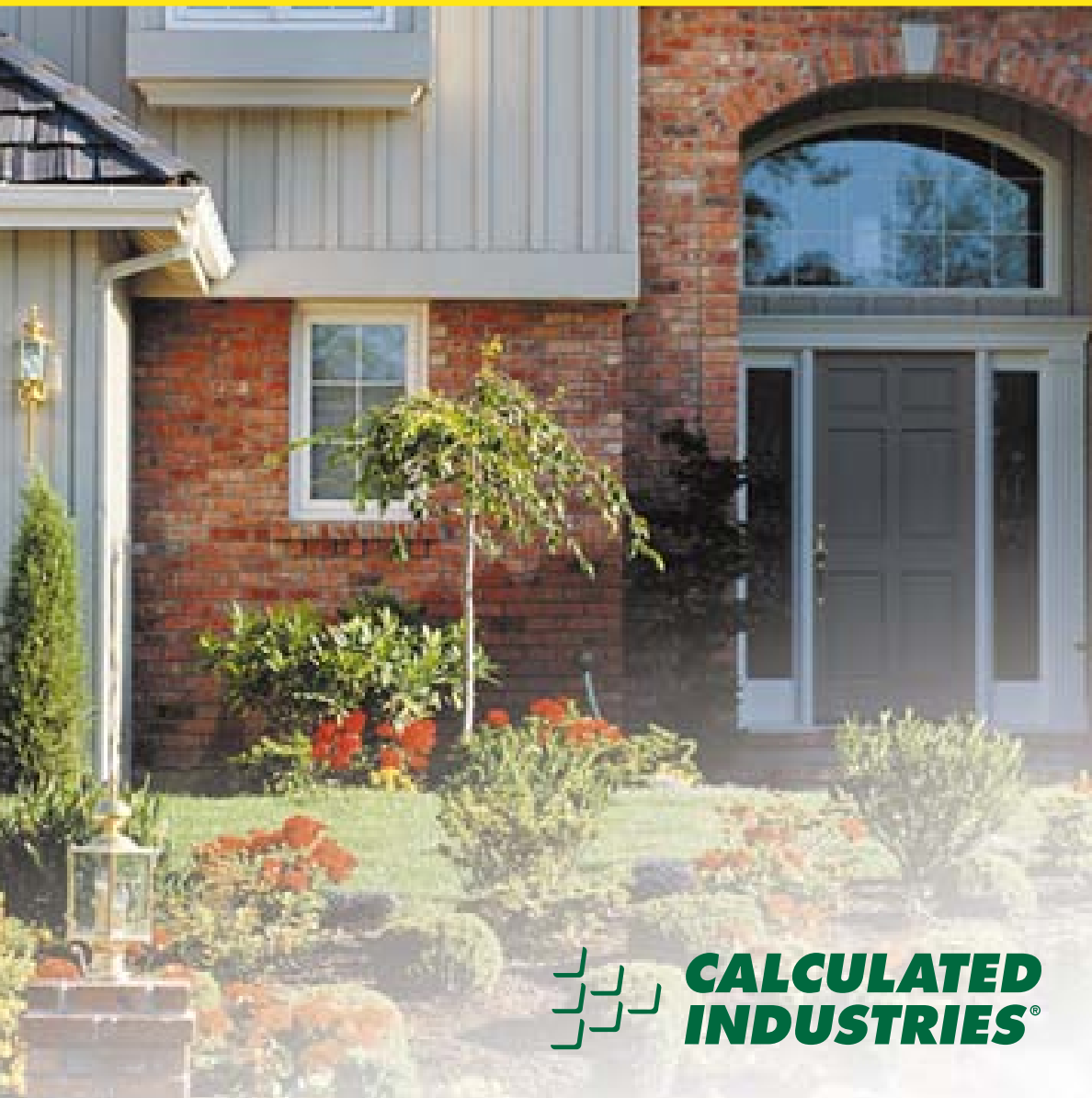
REAL ESTATE MASTER® IIIx

RESIDENTIAL REAL ESTATE FINANCE CALCULATOR

Model 3405

Pocket Reference Guide



CALCULATED INDUSTRIES®

REAL ESTATE MASTER® IIIX

The *REAL ESTATE MASTER IIIX* calculator lets you perform mortgage loan and financing problems with ease!

Quickly Solve:

- *Time-Value-of-Money (TVM) Problems: Find Loan Amount, Term, Interest, Payment, Future Value*
- *Property Tax, Homeowner's Insurance, Mortgage Insurance*
- *P&I, PITI & Interest-Only Payments*
- *Sales Price and Down Payment*
- *Rent vs. Buy*
- *Estimated Income Tax Savings/Deduction*
- *Adjustable Rate Mortgages (ARMs)*
- *Amortization and Remaining Balance*
- *Bi-Weekly Loans*
- *Date Math Problems*
- *New! APR, including MI*
- *New! 80:10:10/80:15:5 Combo Loans*

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KEY DEFINITIONS

:	Colon separator (used for dates, ARMs, Amortization ranges, and Combo loans)
←	Backspace key; for backing up/deleting wrong entry
Rcl	Recalls or re-displays a value when followed by a chosen key (e.g., Rcl Int will display current interest value)
M+	Memory Function: - M+ Adds value on display to Memory - Shift M+ Subtracts value on display from Memory - Rcl M+ Recalls Memory Total - Rcl Rcl Recalls and clears Memory Total
Shift	Sets number of displayed decimal places and activates 2nd functions
Shift −	Change sign

Shift ⊗	Clear All *(Note: perform with caution as it will clear/reset stored values)*
Shift =	Preference mode (see pg. 9 for details)
Shift ÷	Payments per year *(Default 12, for monthly)*
Shift ←	Periodic (identifies entry as periodic instead of yearly)
Shift 000	Month offset
Shift .	Odd-days interest
Shift +	Tax bracket %
Shift Pmt	Estimated tax savings/after-tax payment
Shift Price	Rent vs. buy
Loan Amt	Loan amount
Pmt	P&I, PITI and interest-only payment
Term	Number of years
Int	Annual interest rate
Shift Loan Amt	Future value

Shift Int	APR (annual percentage rate), including mortgage insurance, if entered
Price	Sales price of property
Dn Pmt	Down payment
Shift Term	Bi-Weekly loan
Amort	Amortization function
Shift Amort	Remaining balance
ARM	Adjustable-rate mortgage
Shift ARM	ARM decreasing interest % adjustment
Shift %	ARM lifetime interest cap
Tax	Property tax (enter as percent or dollar amount)*
Ins	Property/homeowner's insurance (enter as percent or dollar amount)*

Shift **Ins** — Mortgage insurance (enter as percent or dollar amount)*

Note: Once Tax/Insurance % (or $) values are entered — as well as TVM values — the second press of* **Tax **Ins**, *or press of* **Shift** **Ins** **Ins** *will compute the $ (or %); third press finds monthly amounts*

Shift **Dn Pmt** — For entering (or finding) Loan-to-Value ratio and computing respective Down Payment and/or Loan Amount

1st Int: Term — Used to enter 1st TD interest:term for Combo Loans

Shift **1st Int: Term** — Used to enter 2nd TD interest:term for Combo Loans

80:10:10

Combo loan function for an 80:10:10 LTV loan; calculates 1st/2nd TD values and compares them to entered fixed-rate loan w/mortgage insurance

**You may enter any LTV prior to pressing this key (e.g., LTV of 90:5, enter* 9 0 . 5 80:10:10 *)*

Shift 80:10:10

Combo loan function for an 80:15:5 loan; same function as above key

Preference Settings — *How to Access*

Press Shift, then ⊖, then keep pressing ⊖ to toggle through the main settings. Press the ⊕ key to advance within sub-setting. Use the ⊖ key to back up. Press any key to exit mode.

Press Shift and then:

1st press of ⊖ — **Decimal Places:**
--Off 0.00 (returns to 2 decimal places @ Off)

⊕ --Permanently holds decimal place setting

2nd press ⊖ — **Payments Per Year:**
--Returns to 12 @ Off)

⊕ --Holds payments/year

3rd press ⊖ — **Tax/Ins. (Cleared or Stored):**
--Clears T&I ($ or %) values @ Off

⊕ --Permanently holds only T&I %

⊕ --Permanently holds T&I ($ OR %)

⊕ --Clears T&I ($ or %) @ On/C On/C

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4th press = **Mortgage Insurance (Cleared or Stored):**
--Clears MI ($ or %) @ On/C On/C

+ --Clears MI ($ or %) @ Off

+ --Holds only MI % at Off

+ --Holds MI ($ or %)

5th press = **Amortization Display Range:**
--ENT-ENT (amortizes for entered year)*

+ --1-ENT (amortizes from beginning to entered year)**

6th press = **Qualifying Ratios:**
--Display at first press of Qual 1 or Qual 2 keys

+ --Display at end of qualifying sequence

**e.g., 5 Amort amortizes for payment numbers 49-60 (only 5th year)*

***e.g., 5 Amort amortizes for payment numbers 1-60 (years 1-5)*

EXAMPLES

Memory — *Add/Subtract/Multiply*

Add 1,500 and 2,650 to the cumulative Memory (M+). Compute subtotal, then subtract 2,000 and find total.

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Add 1st #	1 5 0 0 M+	M 1,500.00
Add 2nd#	2 6 5 0 M+	M 2,650.00
Find total	Rcl M+	M 4,150.00
Subtract	2 000 Shift M+	
		M 2,000.00
Find total and clear Memory	Rcl Rcl	2,150.00

Store 55 and multiply by 40. Then recall Memory Total and multiply it by 60.

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Store 55	5 5 M+	M 55.00
Multiply	× 4 0 =	M 2,200.00
Recall 55	Rcl M+	M 55.00
Multiply	× 6 0 =	M 3,300.00
Clear Memory	Rcl Rcl	55.00

Memory/Storage Registers

Store 10, 20, 30 into Memory Storage keys M0-M2 and recall each value. Then clear all stored numbers.

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Store 1st #	1 0 Shift Rcl 0	M-0 10.00
Store 2nd #	2 0 Shift Rcl 1	M-1 20.00
Store 3rd #	3 0 Shift Rcl 2	M-2 30.00
Recall 1st #	Rcl 0	M-0 10.00
(Repeat for 1 and 2)		
Clear All	Shift ×	"All Cleared" 0.00

Note: There are additional Storage Registers Shift Rcl *3, 4, 5 and 6. You cannot store more than one value in the Storage Registers.*

Finding Commission

If a property sells for $535,000 and your commission rate is 2%, what is your commission in dollars?

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Enter loan	5 3 5 000 × 2 % =	10,700.00

Reduction of Listing Price

A seller is anxious to sell his home and wishes to reduce the listing price by 5%. What is the new price, if it is now listed at $346,000?

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter price	3 4 6 000	**346,000.**
Subtract 5%	− 5 %	**17,300.00**
Find new listing price	=	**328,700.00**

Date of Escrow Closing

If a 45-day escrow begins June 15, 2004, what is the closing date and day?

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter month	6 .	**6-**
Enter day	1 5 .	**6-15-**
Enter year	0 4	**6-15-04**
Add 45 days	+ 4 5 =	**FRI 07-30-04**

Monthly Mortgage (P&I) Payment

Find the monthly (P&I) payment on a 30-year, fixed-rate loan of $265,000 at 6.75% annual interest:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Enter loan	2 6 5 000 Loan Amt	265,000.00
Enter term	3 0 Term	30.00
Enter interest	6 • 7 5 Int	6.75
Find payment	Pmt	1,718.78

Term of a Loan

How long does it take to pay off a loan of $15,000 at 10% interest if you make payments of $200 each month?

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Enter loan	1 5 000 Loan Amt	15,000.00
Enter interest	1 0 Int	10.00
Enter payment	2 0 0 Pmt	200.00
Find term/years	Term	9.85
Number of months	Term	118.19

Interest Rate

Find the interest rate on a mortgage if the loan amount is $98,500, term is 30 years and payment is $1,150 a month:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Enter loan	9 8 5 0 0 Loan Amt	98,500.00
Enter term	3 0 Term	30.00
Enter payment	1 1 5 0 Pmt	1,150.00
Find annual interest	Int	13.78
Find periodic interest	Int	1.15

Loan Amount

Approximately how much can you borrow if the interest rate is 6.5% on a 30-year loan and you can afford $1,500 in monthly payments? What if the interest rate is lowered to 6%?

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Enter interest	6 • 5 Int	6.50
Enter term	3 0 Term	30.00
Enter payment	1 5 0 0 Pmt	1,500.00
Find loan	Loan Amt	237,316.23
Enter new interest rate	6 Int	6.00
Find new loan amount	Loan Amt	250,187.42

Loan Amount Based on Sales Price and Down Payment

Find both down payment dollar amount and loan amount if the sales price is $375,500 and you're planning to put 20% down:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter price	3 7 5 5 0 0 Price	**375,500.00**
Enter down%	2 0 Dn Pmt*	**20.00**
Find down$	Dn Pmt	**75,100.00**
Find loan	Loan Amt	**300,400.00**

**You do not have to label the value as a percent.*

Loan-to-Value

Find the LTV if the sales price is $265,500 and the down payment is $15,000.

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter price	2 6 5 5 0 0 Price	**265,500.00**
Enter down	1 5 000 Dn Pmt	**15,000.00**
Find down%	Dn Pmt	**5.65%**
Find LTV %	Shift Dn Pmt	**94.35%**

Setting Tax and Insurance

Enter an annual property tax rate of 1.5%, a property/homeowner's insurance rate of 0.25% and a mortgage insurance rate of 0.50%:

STEPS	KEYSTROKES	DISPLAY
Set tax%*	1 • 5 Tax	**1.50**
Set insurance%	• 2 5 Ins	**0.25**
Set mortgage insurance%	• 5 0 Shift Ins	**0.50**

**Note: Do not label as a percent, or use the % key; it is automatically registered as a percent.*

To Enter Tax/Insurance in Dollar Figures: Enter dollar values for tax/insurance in the same manner — e.g., to enter $5,500 estimated annual tax, enter 5 5 0 0 Tax.

P&I, PITI and Interest-Only Payments

- **Term: 30 years**
- **Interest: 6.25%**
- **Sales price: $325,000**
- **Down payment: 5%**
- **Property tax: 1.3%**
- **Property insurance: 0.25%**
- **Mortgage insurance: 0.45%**

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter term	3 0 Term	**30.00**
Enter interest	6 • 2 5 Int	**6.25**
Enter price	3 2 5 000 Price	**325,000.00**
Down%	5 Dn Pmt	**5.00**
Set tax%*	1 • 3 Tax	**1.30**
Set insurance%	• 2 5 Ins	**0.25**
Set MI%	• 4 5 Shift Ins	**0.45**
Find loan	Loan Amt	**308,750.00**
Find P&I payment	Pmt	**"run" 1,901.03**
Find PITI payment	Pmt	**2,436.60**
Find interest-only payment	Pmt	**1,608.07**

**Note: Perform the same steps when entering $ Tax/Insurance — e.g., $1,625 tax, enter 1 6 2 5 Tax.*

Quarterly Payment

Find the quarterly payment on a 10-year loan of $15,000 with an annual interest rate of 12%:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Set to 4 payments per year	4 Shift ÷	**4.00**
Enter loan	1 5 000 Loan Amt	**15,000.00**
Enter term	1 0 Term	**10.00**
Enter interest	1 2 Int	**12.00**
Find quarterly payment	Pmt	**648.94**
Return to 12 payments per year	1 2 Shift ÷	**12.00**

Estimated Tax Savings

- **Loan: $150,000**
- **Buyer's tax bracket: 28%**
- **Term: 30 years**
- **Interest: 8%**
- **Property taxes: $1,500**
- **Property insurance: $250**

Note: This is only an estimate.

What is this buyer's estimated income tax savings and "after tax" payment?

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter term	3 0 Term	**30.00**
Enter interest	8 Int	**8.00**
Enter tax$	1 5 0 0 Tax	**1,500.00**
Enter insurance$	2 5 0 Ins	**250.00**
Enter loan	1 5 0 000 Loan Amt	**150,000.00**
Find P&I payment	Pmt "run"	**1,100.65**
PITI payment	Pmt	**1,246.48**
Enter tax bracket	2 8 Shift Pmt	**28.00**
Find annual tax savings	Pmt	**3,767.32**
Monthly tax savings	Pmt	**313.94**
Net payment	Pmt	**932.54**

Rent vs. Buy

- **Term: 30 years** **Property Tax: 1.25%**
- **Interest: 7.5%** **Property Ins: 0.35%**
- **Down: 10%** **Tax bracket: 30%**

If your client is currently renting at $1,250/month, find the comparable home price, loan and estimated income tax savings (at 30% tax bracket).

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter term	3 0 Term	**30.00**
Enter interest	7 • 5 Int	**7.50**
Enter down	1 0 Dn Pmt	**10.00**
Enter tax%	1 • 2 5 Tax	**1.25**
Enter insurance%	• 3 5 Ins	**0.35**
Tax bracket	3 0 Shift +	**30.00**
Enter rent to find comparable home price	1 2 5 0 Shift Price	**221,894.90**
Find comparable loan amount	Price	**199,705.41**
Find PITI payment	Price	**1,692.23**
Find annual tax savings	Price	**5,306.75**
Monthly tax savings	Price	**442.23**
Reset tax bracket	2 8 Shift +	**28.00**

ARM Payment — *Increasing and Decreasing Payments*

- **Loan: $225,000**
- **Term: 30 years**
- **Start interest: 4.25%**
- **1st ARM interest adjustment: increases 1% after 6 months**
- **2nd ARM adjustment: decreases 1.5% at end of 1st year**
- **3rd ARM adjustment: increases 1.25% at end of 2nd year and continues to increase each year thereafter**
- **ARM Cap: 4%**

Find ARM payments through year six:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter loan	2 2 5 000 Loan Amt	**225,000.00**
Enter term	3 0 Term	**30.00**
Enter interest	4 • 2 5 Int	**4.25**
Find initial monthly P&I payment	Pmt	**"run" 1,106.86**
Enter interest cap	4 Shift %	**CAP 4.00**
Enter 1st ARM parameters	1 : • 5 ARM	**1.00 - 0.50**

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STEPS	KEYSTROKES	DISPLAY
Find "adjusted" higher payment for next 6 months	ARM	**"run" 1 1,240.73**
Enter 2nd ARM parameters	1 • 5 : 1 Shift ARM	**-1.50 - 1.00**
Find Year 2 "adjusted" lower payment	ARM	**1 1,047.42**
Enter 3rd ARM parameters	1 • 2 5 : 1 ARM	**1.25 - 1.00**
Find Year 3 "adjusted" increased payment	ARM	**1 1,202.78**
Find Year 4 "adjusted" increased payment	ARM	**2 1,364.24**
Find Year 5 "adjusted" increased payment	ARM	**3 1,530.54**
Find Year 6 "adjusted" increased payment	ARM	**4 1,631.68 M***
Find principal at start of year	Rcl Loan Amt	**205,673.16**
Recall current interest rate	Rcl Int	**8.25**
Recall remaining term	Rcl Term	**24.50**
Clear Cap	0 Shift %	**CAP 0.00**

**The "M" means the lifetime cap is reached and the payment will no longer increase.*

Amortization — *Using "Next" Feature*

- **Loan: $300,000**
- **Term: 30 years**
- **Interest: 7.5%**
- **Start Month: January**
- **Tax Bracket: 28% (Default)**

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter loan	3 0 0 000 Loan Amt	**300,000.00**
Enter interest	7 • 5 Int	**7.50**
Enter term	3 0 Term	**30.00**
Find payment	Pmt	**2,097.64**
Find # payments	Amort	**1-360**
Find total interest	Amort	**455,151.67**
Find total principal	Amort	**300,000.00**
Find total payments	Amort	**755,151.67**
Find all values for the first year:		
Enter Year 1	1 Amort	**1-12**
Find total interest	Amort	**22,406.22**
Find total principal	Amort	**2,765.50**

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STEPS	KEYSTROKES	DISPLAY
Find total payments	Amort	**25,171.72**
Find balance	Amort	**297,234.50**
Remaining term	Amort	**29.00**
Tax deduction	Amort	**6,273.74***

**estimated – mortgage interest only; doesn't include property tax.*

Find all values for the second year:

STEPS	KEYSTROKES	DISPLAY
Display Year 2	Amort	**13-24**
Find total interest	Amort	**22,191.53**
Find total principal	Amort	**2,980.20**
Find total payments	Amort	**25,171.72**
Find balance	Amort	**294,254.30**
Remaining term	Amort	**28.00**
Tax deduction	Amort	**6,213.63**

(etc.—sequence repeats for each year)

Note: Based on default 28% tax bracket & loan start in January. To change these values, see next example.

Amortization for Individual Year(s) — *Month Offset, Tax Bracket Change*

- **Loan: $300,000**
- **Term: 30 years**
- **Interest: 7.5%**
- **Start Month: March**
- **Income Tax Bracket: 30%**

Amortize & find mortgage interest deduction for Year 1, if loan starts in March:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Set Month Start to March	3 Shift 000	**3.00**
Enter tax bracket	3 0 Shift +	**30.00**
Enter loan	3 0 0 000 Loan Amt	**300,000.00**
Enter interest	7 • 5 Int	**7.50**
Enter term	3 0 Term	**30.00**
Find P&I payment	Pmt	**2,097.64**
Find Year 1	1 Amort	**1-10**
Find Year 1 interest	Amort	**18,686.33**
Find principal	Amort	**2,290.11**
Find total payments	Amort	**20,976.44**

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STEPS	KEYSTROKES	DISPLAY
Remaining balance	Amort	**297,709.89**
Remaining term	Amort	**29.17**
Mortgage interest deduction/Year 1 (@30% tax bracket)	Amort	**5,605.90**

Find all values for the 2nd year:

Display Year 2	Amort	**11-22**
Find total interest	Amort	**22,228.43**

Note: Keep pressing Amort *for Year 3, 4, etc. — With "Next" feature, sequence automatically repeats for next year.*

Return Month Offset to 1*	1 Shift 000	**1.00**
Return tax bracket to to 28%	2 8 Shift +	**28.00**

**Note: Remember to reset Month Offset to 1 and tax bracket to 28 (the calculator's default settings) for performing other examples within this guide. Check these settings by pressing* Rcl 000 *and* Rcl + *.*

Balloon Payment/Remaining Balance

- **Loan: $300,000**
- **Term: 30 years**
- **Interest: 7.5%**

Find remaining balance after 10 years:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter loan	3 0 0 000 Loan Amt	**300,000.00**
Enter interest	7 • 5 Int	**7.50**
Enter term	3 0 Term	**30.00**
Find payment	Pmt	**2,097.64**
Find balance payment, or remaining balance	1 0 Shift Amort	**260,384.96**

APR and Total Finance Charges, Including Mortgage Insurance

- **Loan: $250,000**
- **Term: 30 years**
- **Interest: 7%**
- **Cost: 1.5 points + $550**
- **Mortgage insurance (MI): $1,200/year**

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Enter loan	2 5 0 000 Loan Amt	250,000.00
Enter term	3 0 Term	30.00
Enter interest	7 Int	7.00
Find payment	Pmt	1,663.26
Enter MI	1 2 0 0 Shift Ins	1,200.00

Find Loan Costs:

Recall loan	Rcl Loan Amt	250,000.00
Find points	× 1 • 5 % =	3,750.00
Add fees and find total	+ 5 5 0 =	4,300.00
Find APR	Shift Int	7.77
Find total charges	Int	389,072.25
Amt. financed	Int	245,700.00
Total cost	Int	634,772.25
P&I payment	Int	1,663.26
Monthly MI	Int	100.00
PIMI payment	Int	1,763.26

Prepaid (Odd-Days) Interest and APR, Including Mortgage Insurance

- **Loan: $350,000**
- **Term: 30 years**
- **Interest: 6%**
- **Cost: 1.5 points + $750**
- **Mortgage insurance (MI): $2,200/year**
- **Escrow Closes: 7/21/03**
- **1st Payment Due: 8/1/03**

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	0.00
Enter loan	3 5 0 000 Loan Amt	350,000.00
Enter term	3 0 Term	30.00
Enter interest	6 Int	6.00
Find P&I payment	Pmt	2,098.43
Enter MI	2 2 0 0 Shift Ins	2,200.00
Find days between escrow closing and date of 1st payment	8 . 1 . 0 3 − 7 . 2 1 . 0 3 =	11.00
Find prepaid interest/ODI* due at closing	Shift .	641.67
Store prepaid interest in Memory	M+	M 641.67

**This is based on a 360-day year, as most banks use this method for computing prepaid interest.*

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Find Loan Costs:

STEPS	KEYSTROKES	DISPLAY
Recall loan	RCL LOAN AMT	**350,000.00**
Find points	× 1 • 5 % =	**5,250.00**
Add fees and find total	+ 7 5 0 =	**6,000.00**
Add prepaid interest stored in memory	+ RCL M+ =	**6,641.67**
Find APR	SHIFT INT	**6.99**
Find total charges	INT	**478,075.33**
Amount financed	INT	**343,358.33**
Total cost	INT	**821,433.66**
P&I payment	INT	**2,098.43**
Monthly MI	INT	**183.33**
PIMI payment	INT	**2,281.76**
Clear All	SHIFT ×	**"All Cleared" 0.00**

**APR includes points/fees, prepaid interest, and, like the previous example, it also includes the cost of mortgage insurance (an optional entry).*

Appreciation/Future Value

What will a $350,000 home be worth in 3 years, figuring an inflation or appreciation rate of 6%?

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Set to 1 payment per year	1 Shift ÷	**1.00**
Enter PV	3 5 0 000 Loan Amt	**350,000.00**
Enter term	3 Term	**3.00**
Enter approximate rate	6 Int	**6.00**
Find FV	Shift Loan Amt	**416,855.60**
Reset payments per year	1 2 Shift ÷	**12.00**

Bi-Weekly Loans

- **Loan: $212,500**
- **Term: 30**
- **Interest: 7.85%**

Find the Bi-Weekly term, savings, interest savings, total cost, and Bi-Weekly payment:

STEPS	KEYSTROKES	DISPLAY
Clear	On/C On/C	**0.00**
Enter loan	2 1 2 5 0 0 Loan Amt	**212,500.00**
Enter term	3 0 Term	**30.00**
Enter interest	7 • 8 5 Int	**7.85**
Find P&I payment	Pmt	**1,537.09**
Find Bi-Weekly term	Shift Term	**22.97**
Find total interest savings	Term	**94,305.23**
Find total interest paid	Term	**246,545.97**
Find total principal	Term	**212,500.00**
Find total principal plus interest	Term	**459,045.97**
Bi-Weekly payment	Pmt	**768.54**
Clear	On/C On/C	**0.00**

80:10:10 Combo Loan vs. Fixed-Rate Loan with Mortgage Insurance

Compare an 80:10:10 Combo Loan vs. a Fixed-Rate loan w/mortgage insurance. The loan parameters are:

	FIXED w/PMI	COMBO (1st/2nd)
Loan	250,000	250,000
Interest	6.50%	6.00% – 8.50%
Term	30	30 year– 15 year
PMI	0.62%	--
LTV	95%	80% – 10%

STEPS	KEYSTROKES	DISPLAY
1. Enter Fixed-Rate Loan Values and Find Total Payment:		
Clear	On/C On/C	**0.00**
Enter loan	2 5 0 000 Loan Amt	**250,000.00**

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STEPS	KEYSTROKES	DISPLAY
Enter interest	6 • 5 Int	**6.50**
Enter term	3 0 Term	**30.00**
Enter MI%	• 6 2 Shift Ins	**0.62**
Clear Tax	0 Tax	**0.00**
Clear Insurance	0 Ins	**0.00**
Solve for payment	Pmt	**1,580.17**
Solve for PITI (including PMI)	Pmt	**1,709.34**

2. Enter Combo Loan Values:

Enter 1st TD Interest and Term	6 : 3 0 1st Int: Term	**6.00-30.00**
Enter 2nd TD Interest and Term	8 • 5 : 1 5 Shift 1st Int: Term	**8.50-15.00**

3. Find Combo Loan Values:

Find blended interest rate for 1st/2nd TD	80:10:10*	**6.18**
Find equivalent interest rate for fixed-rate loan with mortgage insurance	80:10:10	**7.27**

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(Cont'd)

STEPS	KEYSTROKES	DISPLAY
Find 1st/2nd TD combined monthly payment	80:10:10	**1,605.87**
Find equivalent payment for fixed-rate loan with mortgage insurance	80:10:10	**1,709.34**
Display monthly savings over fixed-rate loan with mortgage insurance	80:10:10	**103.46**
Display adjusted 2nd term (if savings applied to 2nd TD)	80:10:10	**8.71**
Find 1st TD loan amount	80:10:10	**222,222.22**
Find 2nd TD loan amount	80:10:10	**27,777.78**
Find 1st TD payment	80:10:10	**1,332.33**
Find 2nd TD payment	80:10:10	**273.54**
Redisplay LTV	80:10:10	**80.00-10.00**

**Use the 80:10:10 key to enter another LTV; e.g., to enter 90:5, enter 9 0 . 5 80:10:10 and continue as above.*

80:15:5 Combo Loan vs. Fixed-Rate Loan with Mortgage Insurance

Compare an 80:15:5 Combo Loan vs. a Fixed-Rate loan w/mortgage insurance. The loan parameters are:

	FIXED w/PMI	COMBO 1st/2nd)
Loan	350,000	350,000
Interest	6.00%	5.25% – 7.0%
Term	30	30 year– 15 year
PMI	0.62%	--
LTV	95%	80% – 15%

STEPS	KEYSTROKES	DISPLAY
1. Enter Fixed-Rate Loan Values and Find Total Payment:		
Clear	On/C On/C	**0.00**
Enter loan	3 5 0 000 Loan Amt	**350,000.00**
Enter interest	6 Int	**6.00**
Enter term	3 0 Term	**30.00**
Enter MI%	• 6 2 Shift Ins	**0.62**
Clear Tax*	0 Tax	**0.00**

(Cont'd)

(Cont'd)

STEPS	KEYSTROKES	DISPLAY
Clear Insurance*	0 Ins	**0.00**
Solve for payment	Pmt	**2,098.43**
Solve for total payment (including PMI)	Pmt	**2,279.26**

**Skip to Pmt if continuing from the last example, as rates are already cleared.*

2. Enter Combo Loan Values:

Enter 1st TD Interest and Term	5 • 2 5 : 3 0	
	1st Int: Term	**5.25 - 30.00**
Enter 2nd TD Interest and Term	7 : 1 5 Shift	
	1st Int: Term	**7.00-15.00**

3. Find Combo Loan Values:

Find blended interest rate for 1st/2nd TD	Shift 80:10:10*	**5.43**
Find equivalent interest rate for fixed-rate loan with mortgage insurance	80:10:10	**6.79**
Find 1st/2nd TD combined monthly payment	80:10:10	**2,124.27**

(Cont'd)

(Cont'd)

STEPS	KEYSTROKES	DISPLAY
Find equivalent payment for fixed-rate loan with mortgage insurance	80:10:10	**2,279.26**
Display monthly savings over fixed-rate loan with mortgage insurance	80:10:10	**154.99**
Display adjusted 2nd term (if savings applied to 2nd TD)	80:10:10	**9.78**
Find 1st TD loan amount	80:10:10	**294,736.84**
Find 2nd TD loan amount	80:10:10	**55,263.16**
Find 1st TD payment	80:10:10	**1,627.55**
Find 2nd TD payment	80:10:10	**496.72**
Redisplay LTV	80:10:10	**80.00-15.00**

**Use the Shift 80:10:10 keys to enter another LTV; e.g., to enter 90:5, enter 9 0 . 5 Shift 80:10:10 and continue as above.*

APPENDIX

Default Settings

Performing a Reset will return your calculator to the default settings below:

- 12 Periods per Year
- Property Tax/Ins. = % Rates Not Permanently Stored/Clears Upon Off
- Mortgage Ins. = % Rates Not Permanently Stored/Clears upon On/C On/C
- Month Offset of January (1)
- Two Fixed Decimal Places
- Amortization Range = Specified Year (Ent-Ent)

Decimal Place Setting

To set the no. of decimal places displayed:

Shift 6	**0.000000**
Shift 5	**0.00000**
Shift 4	**0.0000**
Shift 3	**0.000**
Shift 2	**0.00**
Shift 1	**0.0**
Shift 0	**0.**
Shift •	**floating point**

Batteries

Replacing the Batteries: Slide open and remove the battery door (located on upper backside of calculator). Remove the old batteries. Insert two new LR-44 button-cell batteries, making sure they're facing positive-side (+) up. Close the battery door.

Reset

You may at times want to reset your calculator to its factory settings (i.e., reset all registers and Preference Settings to their original default values). To do this, turn off the calculator, hold down the ⊠ key, and then turn it back on.

Legal Notes

This equipment has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC rules.

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