

owners guide

# money<sup>®</sup>

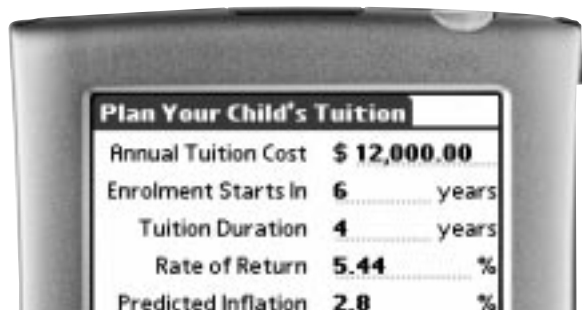
M A G A Z I N E

## FINANCIAL ASSISTANT

FOR PALM POWERED  
HANDHELDS |

Control  
your finances with more than 45  
self-calculating forms | QUICKLY SOLVE

OVER 150 FINANCIAL PROBLEMS BY JUST FILLING IN THE BLANKS



**Plan Your Child's Tuition**

Annual Tuition Cost	\$ 12,000.00	
Enrolment Starts In	6	years
Tuition Duration	4	years
Rate of Return	5.44	%
Predicted Inflation	2.0	%

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## **application credits**

First Printing, September 2002.

This application was designed and developed by Clinton Logan and LandWare, Inc. in cooperation with MONEY Magazine.

## **disclaimer of warranty**

The set of worksheets contained within this application are designed as self-help tools for your independent use. It is important to note that their applicability to your circumstances cannot be guaranteed. We encourage you to seek personalized advice from qualified professionals regarding all personal finance issues.

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The Financial Assistant is a commercial product and is protected by strict copyright laws. The distribution of your personal activation code is prohibited.

## **technical support**

If you have any technical questions concerning this product, we encourage you to contact us via our online support center at: **[www.landware.com/help](http://www.landware.com/help)**

Our online support center contains a significant amount of support information including solutions to frequently asked questions, latest versions and operational tips.

Technical support is also available via phone Monday to Friday from 9:00 am to 6:00 pm EST at (201) 261 7944. When you call, please have available your organizer, the Financial Assistant software and a brief description of the problem. Having this information will ensure faster service from our customer support representatives.

## **product updates**

Free maintenance updates to the application are available to all registered owners. Full information can be found at: **[www.landware.com/upgradeinfo](http://www.landware.com/upgradeinfo)**

# GETTING STARTED

## welcome

Thank you for choosing the MONEY Magazine Financial Assistant for Palm OS. We have worked hard to make this product a powerful yet easy to use financial tool for personal and business use. We hope that you will soon find it to be an invaluable addition to your handheld.

The Financial Assistant is a feature rich product so we encourage you read the entire documentation to get the most out of your software.

## installing the financial assistant

To install the Financial Assistant, follow the steps below.



### HANDHELD REQUIREMENTS:

- Palm OS 3.0 or greater
- Financial Assistant application 415K
- Money 101 Tutorials database\* 30K
- Standard Glossary database\* 140K
- Large Glossary database\* 546K

\* These databases may be omitted to conserve memory if the glossary and/or Money 101 tutorials are not required.

NOTE: To ensure acceptable search and navigation performance the Glossary.pdb database must be installed on the handheld's internal memory. The application can reside on a Palm OS expansion card if desired.

### Windows installation instructions:

1. Insert the CD into your CD-ROM drive.
2. The installer should automatically activate. If not, then select *Run* from the Windows *Start* menu and enter *x:setup*, where *x* is the letter assigned to your CD-ROM drive.
3. Follow the installer's instructions on screen.
4. Select the correct user name for your handheld and click on the *Next* button.
5. Press the HotSync button to install the application and glossary data onto your handheld.
6. Now follow the steps overleaf to activate the application.

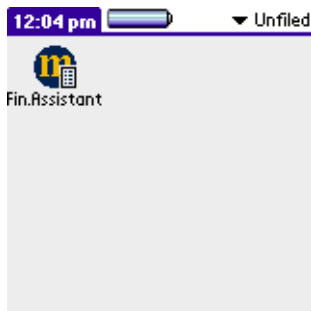
### Macintosh installation instructions:

1. Insert the Financial Assistant CD-ROM into your Macintosh CD-ROM drive.
2. Double-click on the installer icon.
3. Follow the instructions on screen.
4. Ensure you select the correct user name when prompted.
5. Press the HotSync button to install the application and glossary data onto your handheld.
6. Now follow the steps overleaf to activate the application.

### SD Card installation instructions:

1. Insert the Financial Assistant SD card into your handheld's expansion slot.
2. Follow the steps overleaf to launch and activate the application.

## launching the financial assistant



Once installed, the icon depicted to the left will appear in the application launcher of the handheld. By default it is placed in the *Unfiled* category. Tap the icon to launch the application.

### PRODUCT ACTIVATION

The Financial Assistant will function for 14 days before requiring you to enter a valid activation code. This period is provided for the express purpose of product evaluation prior to purchasing. If you have already purchased this product you should enter your personal activation code now. This will ensure you are able to use the application on an ongoing basis.



#### **If you obtained the Financial Assistant electronically:**

1. Launch the Financial Assistant application.
2. Tap the *Register Now* button.
3. Enter your personal activation code (as provided by the LandWare sales representative) onto the *Enter Code* field.
4. Tap the *Register* button.

#### **If you obtained the Financial Assistant on a CD-ROM:**

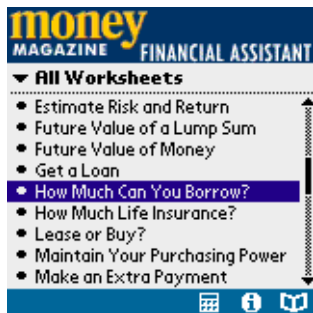
1. Launch the Financial Assistant application.
2. Tap the *Register Now* button.
3. Enter your personal activation code as found on the inside of the CD-ROM case.
4. Tap the *Register* button.

#### **If you obtained the Financial Assistant on an SD card:**

1. Insert the Financial Assistant SD card into your handheld's expansion slot.
2. Launch the Financial Assistant application.
3. Tap the *Register Now* button.
4. Enter your personal activation code as found on the product registration card.
5. Tap the *Register* button.

# OPERATIONAL OVERVIEW

## the main worksheet list view



TIP: Enter the first letter of a worksheet name to quickly advance the list to the applicable worksheet.

The main worksheet list provides a collection of 45 intuitive “fill-in-the-blanks” worksheets, conveniently grouped into 8 categories. Each worksheet has been especially designed so non-experts and experts alike can make over 150 real-world financial decisions including:

- Loans, Leasing and Mortgages
- Marketing and Investment Analysis
- Personal Finance
- Everyday Math
- Lease vs. Buy
- Retirement Planning
- Long-Term savings

Tap the Worksheet category popup menu (shown as *All Worksheets* in the above illustration) to display a list of all worksheets associated with a financial category.

## FAVORITE WORKSHEETS

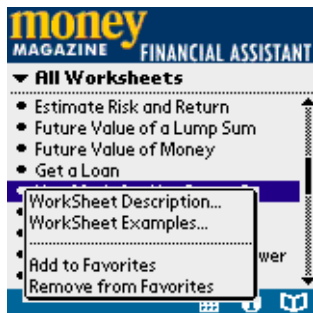
In addition to the precompiled worksheet categories, the Financial Assistant allows you to create your own personal list of frequently used worksheets.

### To display your favorite list of worksheets:

1. Tap the worksheet category popup menu.
2. Tap on the *Favorite Worksheets* entry.

### To add a worksheet to your favorite list:

1. Scroll to the worksheet entry in the list view
2. Tap and hold the stylus on the worksheet name.
3. Select *Add to Favorites* from the popup menu.




TIP: Tap and hold the stylus on the worksheet name for a fraction of a second to quickly access the worksheet details.


## OPENING A WORKSHEET

Tap on the name of the worksheet you want to use. Full details are provided on page 7.

## OPENING THE FINANCE GLOSSARY

Tap on the  icon to open the Financial Glossary. Full details are provided on page 9.

## OPENING THE MONEY 101 TUTORIALS

Tap on the  icon to open the Money 101 tutorials reader. Full details are provided on page 9.

## working with worksheets

### Retire Rich!

Ann. Pension Income	\$ 10000
Current Age	38 years
Retirement Age	60 years
Life Expectancy	80 years
Tax Rates	28% / 25%
Inflation Factor	2.3% (adj.)
Current Savings	\$ 166,980.23
Annual Yield	5.5 %
Annual Contribution	\$
Ann. Retire. Income	\$ 24000

Done X Help

TIP: To validate the current set of values within a worksheet, tap on the current result field name (with highlighted white on black text).

TIP: To move to the next field, enter a *return* or *tab* character or press the hardware scroll buttons on the handheld.


While each Financial Assistant worksheet has been designed for a specific purpose, the worksheets have many features in common. Once you are familiar with these features, you can use any worksheet in the collection with confidence.

The Financial Assistant contains a vast variety of worksheets which all share the common format illustrated to the left.

## ENTERING INFORMATION

You can enter data directly into the fields identified with a dotted underline using graffiti, the handheld's keyboard or the integrated onscreen number pad.

Tap on a field with a dotted outline 28% / 25% to open a secondary details slip. This slip allows you to enter further information that generates the result for that field.

Some worksheets can solve multiple problems for a given set of input values. The current result field is indicated by white text on black background (e.g. *Current Savings* in the above illustration). To choose an alternative calculation within a worksheet, tap any field name with an  icon. (e.g. *Annual Yield*, *Annual Contribution*, *Ann. Retire Income* etc.)

Calculation results are automatically displayed once a valid set of input values have been entered.

## USING THE ONSCREEN NUMBERPAD

The Financial Assistant provides an integrated onscreen number pad to help enter and calculate data.

### To use the on-screen number pad:

1. Tap twice quickly on an empty field. The keypad to the left will appear.
2. Tap in the digits of the desired number.
3. Tap OK.

The number pad facilitates “on the fly” calculations as well as the ability to store intermediate results in its continuous memory.

The number-pad's open action (double-tap by default) can be altered in the Financial Assistant's preferences screen. Full details are on page 10.

### Retire Rich!

Ann. Pension Income	\$ 6000
Current Age	35 years
Retirement Age	60 years

**Current Age**

35.

C	7	8	9	-	÷
+	4	5	6	+	x
OK	1	2	3	=	f <sub>xc</sub>
	0	.	+/-		

## Compare Loans

**Add New Loan**

Loan Name **TEA Finance**

Payments Per Year **12**

Term **36** ▼ Mths

Ann. Interest rate **8.9** %

Loan Amount \$ **23000**

Payment \$ **730.32**

## OPENING A DETAILS SLIP

To enter data into a worksheet, you occasionally need to enter secondary information into a popup details slip.

A details slip is opened whenever you tap on a field with a dotted outline (e.g. **28% / 25%**). Each slip has a set of fields on which you can enter data. When you close the slip, the result or summary appears in the main worksheet.

Some slips also allow you to customize the field labels to suit the particular problem at hand.

### To erase all data values from a details slip:

1. Tap the  button. All previously entered values will be deleted from the worksheet.

### To delete the entry from the main worksheet:

1. Tap the *Delete* Button. This slip is deleted (along with the corresponding entry on the main worksheet).

## USING ONLINE HELP

Help is just a tap away. Each worksheet is equipped with a detailed description and a set of examples to further illustrate its use.

### To access the online help from a worksheet:

1. Tap the *Help* button at the bottom of the screen.
2. Select *WorkSheet Description...* from the popup menu.

## Get a Loan

Use this worksheet to determine various features of your loan.

Most loans require 12 PAYMENTS PER YEAR (1 each month). It is assumed that you make the payment at the end of each period.

The TERM of a loan is the length of time you have to pay back the

## creating financial schedules

Obtaining detailed insight into your financial planning is as easy as a single tap. The Financial Assistant provides customizable schedules for its savings, mortgage, loan and depreciation worksheets.

### To create a schedule for a given worksheet:

1. Enter the data into the worksheet.
2. Tap the schedule button
3. The schedule will be generated on-screen.

### To advance the schedule to a given payment or period:

1. Tap the *Show...* button
2. Select *Specific Item...*
3. Enter the payment or period number.
4. Tap the OK button.

## Reach Your Savings Goal

Period	Interest	Balance
1	14.00	1,464.00
2	20.50	1,934.50
3	27.08	2,411.58
4	33.76	2,895.34
5	40.53	3,385.88
6	47.40	3,883.28
7	54.37	4,387.64
8	61.43	4,899.07
Total	1,624.37	



## using the financial glossary




TIP: Tap on the definition text to scroll the term definition down by four lines.

TIP: Tap on the alphabet tabs to quickly advance the list to the term that begins with that letter.  
Example: Tap **def** to advance to the term beginning with 'd'. Tap it again to advance to 'e'. Tap it a third time to advance to 'f'.

The Financial Assistant provides a financial glossary which covers all aspects of business and finance.

### To lookup a financial term:

1. Tap the glossary button 
2. Enter the first letter of the term you want to find into the *Look Up* field. The list will scroll to the financial terms that start with that letter.
3. Continue entering characters until the term you are looking for is highlighted or visible.
4. The definition of the term will automatically be displayed in the lower half of the screen.

The Financial Assistant offers the choice of two optionally installable glossaries: A standard 1,700 term edition which covers the core of the business language and an encyclopedic version which contains over 7,200 terms and definitions.

## money 101: top things to know




The Financial Assistant includes an optionally installable set of electronic tutorials created by the editors at MONEY Magazine.

Each tutorial has been especially designed to help you invest, save, borrow and spend more wisely.

Whether you are interested in the basics of banking and saving, investing in mutual funds or just want to control your debt, the essentials of each tutorial can be easily absorbed while you are on the go.

### To access the money 101 tutorial topics:

1. Open the main worksheet list view.
2. Tap the  icon at the bottom of the screen.

### To access a money 101 tutorial:

1. Scroll to the lesson entry in the list view
2. Tap on the lesson name.

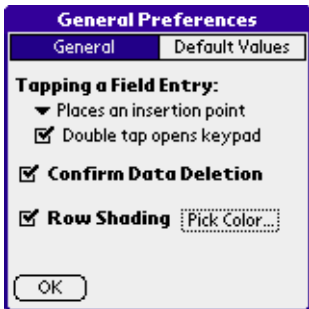
For those who want to dig deeper be sure to visit **[www.money.com/pf/101](http://www.money.com/pf/101)** for greater detail—including calculators, quizzes and a library of supplemental materials.

## configuring financial assistant

MONEY Magazine Financial Assistant provides a number of different options that allow you to customize the way it works. Selecting the *Preferences* command from the *Options* menu opens the preferences window allowing you to customize the following:

### GENERAL PREFERENCES

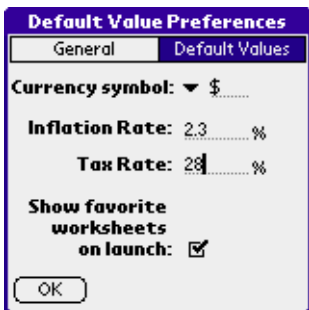
Tap the *General* tab on the preferences window to specify the following attributes:



- **Tapping a Field Entry** — Specify the default editing behavior when you tap on a input field.
- **Confirm Data Deletion** — Financial Assistant will prompt before deleting worksheet values.
- **Row Shading** — Select to fill alternate lines in the schedule views with a background color. To change the color, tap on the *Pick Color...* button.

### DEFAULT VALUES

Tap the *Default Values* tab on the preferences window to specify the following attributes:



- **Currency Symbol** — Specify the currency symbol used within the worksheets.
- **Inflation Rate** — Specify the default inflation rate to use. At the time of printing this is approximately 2.3% in the United States.
- **Tax rate** — Specify your current tax rate or tax bracket for which you pay on earnings during the year.
- **Show favorite worksheets on launch** — Select to display the favorite worksheet list every time the Financial Assistant is opened.

# WORKSHEET REFERENCE

Each Financial Assistant worksheet is designed for a specific purpose. By familiarizing yourself with its unique features, you can make the fullest use of each worksheet. The explanations in this section include practical examples of how to use each worksheet, as well as definitions of financial terms. Worksheet field names appear in *italics*.

## loans and mortgages

### CASH NEEDED TO BUY A HOME

When you purchase something with a very high purchase price, such as a home, you are likely to get a loan for most of the purchase price. The remainder — the amount you have to pay in cash — will determine what you can afford to buy.

Be sure to take into account all possible expenses — you want to make sure you have enough cash.

A down payment is a partial payment of the offer price; You can enter the down payment as a percentage of the offer price (*% Downpayment*) or as an amount (*Down payment Amt.*)

Tap the *Financing Costs*, *Legal Fees*, *Other Payments* and *Cash Receipts* buttons to enter the respective costs.

The seller may expect reimbursement for certain pre-paid expenses such as property tax and utility bills.

You might have to pay *Discount Points* if you get a Federal Housing or Veteran's Administration loan to finance the purchase. Each point is 1% of the loan amount.

You pay a *Recording Fee* to record your title to the property (the deed) in the county courthouse.

You pay an attorney a *title option* fee to review title evidence and render an opinion about the condition of the title (that is, whether the seller really owns the property and if there are any liens against it).

#### Cash Needed to Buy a Home

Offer Price	\$ 225000
% Downpayment	10 %
Downpayment Amt.	\$ 22,500.00
Financing Costs	\$ 0.00
Legal Fees	\$ 1,000.00
Other Payments	\$ 5,000.00
Cash Receipts	\$ 0.00
Amount to Finance	\$ 202,500.00
Cash Needed to Buy	\$ 28,500.00

Done X Help

#### Edit Financing Costs

Discount Points	%
Loan Service Charge	\$
Appraisal Fee	\$
Processing Fee	%
Other	\$
Other	\$

OK X

#### Edit Other Payments

Prepaid Taxes	\$
Seller Prepaid	\$
Insurance Premium	\$
Utility Deposit	\$
Repairs/Renovation	\$ 5000
Other	\$

OK X

You may have to pay a *transfer tax* to transfer the property title.

A *Cash receipt* is an amount the seller owes upon your purchase of the property.

The *Cash Needed to buy* is the amount you need available immediately upon purchase, including the down-payment.

#### Example problems:

- How much *cash is needed to buy* a house if you offer \$225,000 with a 10% down payment, and \$5,000 of repairs and \$1000 legal fees are needed immediately?

## COMPARE LOANS

Use the worksheet to calculate and compare the payment, principal and interest of different loans.

Tap the *New Loan* button to enter the details of the new Loan.

Tap the Loan entry line to edit or delete the loan.

#### Example problems:

- Do you pay more Interest on a \$12,000 loan over 3 years or a \$10,000 loan over 2 years if the other loan conditions are the same?
- What is your monthly payment for a \$100,000 loan you must pay back over 20 years, if the interest rate is 5% compared with 4.75%?

## GET A LOAN

Use the worksheet to determine the annual interest rate, amount or periodic (e.g monthly) payment of your loan.

The *Loan Term* is the length of time you have to pay back the total *Loan Amount*.

Most loans require 12 *payments per year*— one each month. It is assumed that you make the payment at the end of each period.

#### Example problems:

- What would your *Payment* be each month on a \$10,000 loan at 7% interest for 5 years?
- What *Loan Amount* can you afford to borrow if you can repay \$4000 a month for 25 years and the current interest rate is 8%?
- What *Annual Interest Rate* do you need to borrow \$15,000 for 3 year, if you can repay no more than \$500 per month.

Compare Loans		
Loan	▼ Payment	▼ Interest
3 Year Loan	381.04	1,717.44
2 Year Loan	456.39	953.36
20 Yr Loan 1	659.96	58,390.40
20 Yr Loan 2	646.22	55,092.80

Done New Loan Help

Get a Loan	
Payments per Year	12
Loan Term	5 ▼ Mths
Annual Interest Rate	7 %
Loan Amount	\$ 10000
Payment	\$ 2,035.14

Done X Help

TECH NOTE: Interest is compounded at the same frequency as payments are made.

## How Much Can You Borrow?

Affordable Monthly Payment	\$ <b>300</b>
Annual Interest Rate	<b>8</b> %
Loan Term	<b>2</b> Years
The Amount you can afford to borrow is	\$ <b>6,633.16</b>

Done X Help

## HOW MUCH CAN YOU BORROW?

Use this form to determine the maximum size of your loan, based on how much you can pay each month.

### Example problems:

- How much can you borrow if you can afford a monthly payment of \$300 for a term of 2 years and the interest rate is 8%?
- What mortgage amount can you afford if you can make monthly payments of \$900 over 25 years at an interest rate of 9.25%?

## Make an Extra Payment

Payment per Period	\$ <b>800</b>
Payments per Year	<b>12</b>
Loan Term	<b>20</b> Years
Annual Interest Rate	<b>6</b> %
Additional Payment	\$ <b>10000</b>
Add. Pmt. Paid After	<b>2</b> Years
Amount Saved	\$ <b>17,030.02</b>
Term Reduced By	<b>2.75</b> Years

Done X Help

## MAKE AN EXTRA PAYMENT

Use this form to help you determine the impact of making an extra payment on a loan.

The principal is the amount on which interest is charged (that is, the amount of the loan or mortgage). "Paying down the principal" with extra payments is the fastest way to reduce the interest cost of a loan.

### Example problems:

- If you have a \$200,000 loan requiring a monthly payment of \$800 at 6% interest for 20 years, and you make an additional principal payment of \$10,000, what is the *Amount saved*?
- How much is your *Term reduced by* on a bank loan of \$5,000 being repaid over 3 years, if you make an extra payment of \$400 at the end of the year?

## Refinancing Your Mortgage

Current Payment	\$ <b>800</b>
Proposed Payment	\$ <b>700</b>
Your Tax Rate	<b>28</b> %
Total Closing Costs	\$ <b>1000</b>
Tax Deductible Costs	\$ <b>120</b>
After-Tax Rate of Return	<b>4.5</b> %
The new loan will pay for itself in	<b>14.15</b> months

Done X Help

## REFINANCING YOUR MORTGAGE

Use this worksheet to determine how soon a refinanced mortgage will pay for itself (that is, how soon it will pay for the closing costs and penalties of the former mortgage).

*Your tax rate* is the percentage of combined taxes you pay on earnings during a year (your tax bracket).

*Tax Deductible (closing) costs* can be deducted from income before taxes.

The *after-tax rate of return* is the percentage return you really get from an investment after you pay tax on the profit.

### Example problem:

- If you refinance your mortgage at a lower interest rate so your monthly payment is \$700 instead of \$800, when will you actually start saving money?

## Standard vs Balloon Mortgage

Standard Mortgage	<b>BNZ Loan</b>
Total Interest	<b>\$ 57,638.32</b>
Total Principal	<b>\$ 120,000.00</b>
Total Repayable	<b>\$ 177,638.32</b>
Balloon Mortgage	<b>ANZ Loan</b>
Total Interest	<b>\$ 61,075.83</b>
Total Principal	<b>\$ 115,924.17</b>
Total Repayable	<b>\$ 177,000.00</b>

Done X Help

## STANDARD VS. BALLOON MORTGAGE

Use this worksheet to determine and compare standard and balloon mortgage amounts.

A *balloon mortgage* is like an ordinary (standard) mortgage, except you agree to pay off the balance on a certain date when the mortgage officially ends.

A *balloon payment* is the balance of the mortgage on the payoff date.

A balloon payment makes your monthly payment smaller, thus it increases the total amount you can afford to borrow. When you choose a balloon mortgage over a standard one, however, you should be sure that you can really afford to make the balloon payment when it is due.

You can also use the Balloon mortgage details slip to calculate balloon loans and leases as well.

Balloon Mortgage		i
Loan Name	<b>ANZ Loan</b>	
# Payments/Year	<b>12</b>	
Loan Term	<b>15</b> ▼ Years	
Balloon Payment	<b>\$ 15000</b>	
Ann. Interest Rate	<b>5.6</b> %	
Loan Amount	<b>\$ 115,924.17</b>	
Payment	<b>\$ 900</b>	
OK		X

### Example problems:

- Which type of mortgage would carry less *Total Interest* on a \$120,000 mortgage over 15 years?
- With which type of mortgage could you borrow more *Principal* at a 9% interest rate and payments of \$1,200 per month?
- How much are your payments on a \$100,000 mortgage at 7% interest if you plan to make a \$15,000 balloon payment?

## What's Your Balloon Payment?

Loan Amount	<b>\$ 25000</b>
Loan Term	<b>4</b> ▼ Years
Annual Interest Rate	<b>6.7</b> %
Payments per Year	<b>12</b>
The Balloon Payment is due in	<b>3</b> years
Balloon payment is	<b>\$ 6,889.60</b>

Done X Help

## WHAT IS YOUR BALLOON PAYMENT?

Use this worksheet to determine the amount of a balloon payment, based on the terms of a loan.

### Example problem:

- What final balloon payment must you make if you have a \$25,000 loan and 3 years until the balloon payment is due?

## What's Your Loan Balance?

Payment per Period **\$ 345**  
Annual Interest Rate **8** %  
Loan Term **3** ▼ Years  
Payments per Year **12**  
# Payments Made **11**  
Outstanding Balance **\$ 7,920.34**  
Loan Amount **\$ 11,009.57**

Done X Help ?

TECH NOTE: Interest is compounded at the same frequency as payments are made. Payments are assumed to occur at the end of the compounding period.

If interest is compounded and applied at intervals that do not coincide with payments (i.e. Canadian Mortgages), use the Compare Interest Rates worksheet (below) to convert the interest rate to an equivalent interest rate with compounding periods that match the regular payments.

## WHAT IS YOUR LOAN BALANCE?

Use this worksheet to determine the *outstanding balance* of your loan or the number of payments you have made to date.

The period is the length of time between payments, and determines how often interest is added to the loan.

The *Payment per Period* is the regular payment amount you make on your loan.

The *Payments per Year* field allows you to specify how often payments are made (e.g. enter 12 for monthly payments, 2 for Bi-Annual etc.).

### Example problems:

- What is your *Outstanding Balance* on a 3-year loan at 8% interest if you have made 11 payments of \$345 each?
- What *Number of payments* have you made on a 25-year loan at 7% interest if your outstanding loan balance is \$124,500 and your monthly payment is \$1250

## the value of money

### Compare Interest Rates

ANZ Bank 6.7% Daily  
Effective Rate **6.9289** %  
ASB Bank 6.8% Qtrly  
Effective Rate **6.9754** %  
Interest Rate Three -Unassigned-  
Effective Rate %

Done X Help ?

## COMPARE INTEREST RATES

Use this worksheet to convert and compare interest rates with varying magnitudes and compounding frequencies.

Interest rates are normally expressed as a *Nominal Rate* which reflect an annual rate that is compounded periodically (e.g. 6.8% compounded Quarterly).

When investments have different compounding periods (i.e. monthly vs. quarterly) then *Effective Rates* are used to compare them.

The *Effective Rate* is an annual measure of an interest rate that fully reflects the effects of compounding. In personal finance the effective rate is commonly called the Annual Percentage Rate (APR).

### Example problem:

- Which of the following offer the best interest rate?
  - ANZ Bank: 6.7% annual interest compounded daily
  - ASB Bank: 6.8% annual interest compounded quarterly.

ANZ Bank ⓘ

Int. Compounded ▼ Daily

Nominal Rate **6.7** %

Effective Rate **6.9289** %

OK X

## Compound Amount and Interest

Principal Amount	\$ 13000
Term	1 ▼ Mths
Annual Interest Rate	4 %
Interest is paid	▼ Daily
Compound Amount	\$ 13,043.40
Interest Earned	\$ 43.40

Done X Help

## COMPOUND AMOUNT AND INTEREST

Use this worksheet to calculate the compound amount and compound interest of a loan or investment.

Compound interest is interest for one period that is added to the principal before the interest for the next period is calculated.

The *Interest is paid* interval determines how often the interest is calculated and added to the principal amount.

The *Compound Amount* is the final amount paid or earned (*principal amount* plus *Interest Earned*).

### Example problems:

- What is the *Interest Earned* in 1 month in a bank account holding \$13,000, if the interest rate is 4% compounded daily?
- What is the final, *compound amount* you really pay after paying back a \$12,000 loan at 6.25% interest over 5 years?

## Currency Conversion

United States \$	299.99
Euro	331.79
UK Pounds	206.09
Canada Dollars	471.02
Japanese Yen	38,680.85
Hong Kong \$	2,339.87
New Zealand \$	670
Swiss Francs	451.76

Done Edit Items Help

## CURRENCY CONVERSION

Use this worksheet to convert between eight user defined currency amounts based on any exchange rate.

Enter the currency amount you want to convert from and the other currency values will be updated automatically.

### To edit the currency labels and/or exchange rates:

- Tap the *Edit Items* button
- Edit the Name and/or Rate field
- Tap the *Save* button

*Exchange Rates* are specified as a ratio from your base currency. The base currency normally corresponds to your home currency and has an exchange rate of 1.0

All other exchange rates are expressed as fractions of the base rate i.e

$$\text{Base currency} = \text{Foreign currency} \times \text{Rate}$$

### To import exchange rates from Pocket Quicken:

- Tap the *Edit Items* button
- Tap the *Import Rates...* button

### Example problem:

- How much is a DVD player that sells for \$670 New Zealand Dollars in your home currency?

### Edit Currency Details

Name	Code	Rate
United States \$	USD	1.00000
Euro	EUR	1.10600
UK Pounds	GBP	0.68700
Canada Dollars	CAD	1.57010
Japanese Yen	JPY	128.94000
Hong Kong \$	HKD	7.79980
New Zealand \$	NZD	2.23340
Swiss Francs	CHF	1.50590

Save Cancel Import Rates...

TECH TIP: For exchange rates to be correctly updated you must ensure the correct three letter ISO 4217 code has been entered for each currency.



## Depreciation

Method	▼ Str. Line
Original Asset Cost	\$ 25000
Asset Salvage Value	\$ 3000
Expected Asset Life	12 years
Length of 1st Year	12 months
Calc. Value After	3 years
Annual Discount	%
Str. Line Multiple	%
Depreciated Value	\$ 19,500.00
Accum. Depreciation	\$ 5,500.00
Done	X
Help	

## DEPRECIATION

Use this worksheet to determine the depreciation of an asset using three common calculation methods.

Depreciation is the allocation of an asset's cost to future income periods over which the asset is used.

Use the Straight Line *method* (*Str. Line*) if the asset depreciates the same amount every year.

Use the Sum of years-digits *method* (*Sum of Yrs*) if the asset depreciates more in the early years.

Use the Declining Balance *method* (*Dec. Balance*) if the asset depreciates at a certain percentage (the Declining Balance factor) of its original value each year.


If you are using the Declining Balance method enter the declining-balance factor as an *Annual Discount* percentage off the original value or as a multiple of the straight-line depreciation rate (*Str. Line Multiple*).

The *Asset Salvage Value* is its estimated selling price at the end of the depreciation period.

Enter the remaining *Length of 1st year* for situations in which the acquisition date of an asset does not coincide with the start of a tax or fiscal year.

Enter the year for which the depreciation will be calculated into the *Calc. Value After* field.

The *Depreciated Value* is the difference between the *Original Asset cost* and the *Asset Salvage value*.

Tap the  button to instantly view a depreciation schedule on-screen.

## Depreciation

Year	▼ Depreciate	▼ Remaining
	0.00	25,000.00
1	1,833.33	23,166.67
2	1,833.33	21,333.33
3	1,833.33	19,500.00
4	1,833.33	17,666.67
5	1,833.33	15,833.33
6	1,833.33	14,000.00
7	1,833.33	12,166.67
Total	22,000.00	
OK	Show...	

### Example problem

- What is the Depreciated value of your new car after 3 years if its original cost was \$25,000, its expected life is 12 years, its salvage value is \$3,000, and you are using the Straight Line method of depreciation?

## Future Value of Money

# Payments/Year	12
Annual Interest Rate	8.25 %
Loan Term	20 Years
Payment Amount	\$ 100
Future Value	\$ 60,766.02
Done	X
Help	

TECH NOTE: Interest is compounded at the same frequency as payments are made. Payments are assumed to occur at the end of the compounding period.

If interest is compounded and applied at intervals that do not coincide with Payments, use the Compare Interest Rates worksheet to convert the interest rate to an equivalent interest rate that with compounding periods that match the regular payments.

## THE FUTURE VALUE OF MONEY

Use this worksheet to determine the future value of periodic payments you are paying or receiving today.

The *Future Value* of money is the value, at a given future date, of a series of equal payments you are making or receiving, compounded at a given interest rate. Use the future value to compare different investment opportunities or potential obligations.

Enter the # *Payments per Year* to specify how often payments are made (e.g. 12 for monthly payments, 2 for Bi-Annual payments etc.)

### Example problem

- What is the *Future Value*, after a 20-year term, of a retirement account to which you contribute monthly payments of \$100 and which earns 8.25% interest?

## Present Value of Money

Periods per Year	1
Future Value	\$ 6000
Annual Interest Rate	9 %
Loan Term	5 Years
Present Value	\$ 3,899.59
Done	X
Help	

TECH NOTE: Interest is compounded at the same frequency as payments are made. Payments are assumed to occur at the end of the compounding period.

## THE PRESENT VALUE OF MONEY

Use this worksheet to determine the current value of periodic payments you will pay or receive in the future.

The *Present Value* of money is today's value, discounted at a given *Annual Interest Rate*, of periodic payments you will make or receive in the future.

Use the *Present Value* to compare different investment opportunities or potential obligations.

To a lender or borrower, *Present Value* is the amount of a loan; to an investor, *Present Value* is the size of the initial investment.

### Example problems:

- What is the *Present Value* of 5 annual payments you will receive of \$6,000, if the interest rate is 9%

# make investments

## Bond Price and Yield

Annual Coupon Rate	9.75	%
Settlement Date	1/1/01	
Maturity Date	6/30/10	
<b>Bond Price</b> ➔ \$87.45		
Yield to Maturity	12	%
Done X Help		

TIP: To ensure responsive data entry performance during *Yield to Maturity* calculations it is recommended that the *Maturity Date* is entered last.

TECH NOTE: All calculations are based on a 365-day year. Interest is compounded semi-annually.

## BOND PRICE AND YIELD

Use this worksheet to determine the price you should pay for a bond or the interest rate on a bond held to maturity.

The *Annual Coupon Rate* is the interest rate stated on the bond.

The *Bond Price* is expressed "per \$100 face value" or in other words the price you really pay for a \$100 bond.

The *Yield to Maturity* is the actual interest rate you expect for the bond. This is usually the prevailing rate on the investment market when you buy the bond.

### Example problems:

- What is the price of a bond you will own from Jan. 1, 2001 to June 30, 2010, if the annual coupon rate is 9.75% and the bond's yield will be 12%
- What is the yield of a bond with a purchase (settlement) date of Oct. 10, 2001 and a maturity (redemption) date of Oct. 10, 2011, if the annual coupon rate is 11% and the bond's actual price per \$100 is \$103.50?

## Future Value of a Lump Sum

Initial Investment	\$5000	
Term	10	Years
Annual Interest Rate	7	%
Interest is compounded	Annually	
The Investment's Future value is	\$9,835.76	
Done X Help		

## FUTURE VALUE OF A LUMP SUM

Use this worksheet to determine the future value of an initial lump sum of money deposited in an interest earning investment account.

The *Investment's Future Value* is the *Initial Investment* sum's value at a given future date, compounded at a given interest rate.

*Interest is compounded* (calculated and added) to the principal amount at a specified frequency.

### Example problem:

- What is the value after 10 years of a \$5000 certificate of deposit (CD) earning 7% interest per year.

## Sales Volume, Price and Profit

Variable Costs/Unit	\$ 275.00
Fixed Costs	\$ 5,000.00
Num. of Units to Sell	40.32
Sale Price per Unit	399
Total Profit	0

Done X Help

TIP: To find the break-even point, enter 0 as the Profit.

## SALES VOLUME, PRICE AND PROFIT

Use this worksheet to determine: How many units of a product you must sell to make a certain profit or the price you must charge per unit to make a certain profit or the total profit you will make on that product.

Tap the *Variable Costs/Unit* button to record the costs that vary in relation to the volume of units sold.

Tap the *Fixed Costs* button to record expenses (such as packaging design) that do not vary with the volume of activity or output of that product.

To find the gross profit at a given volume, tap the *Total Profit* label and fill in the rest of the worksheet.

### Example problem:

- How many cameras must you sell each month to break even if you buy each camera for \$275, sell each for \$399, and your fixed costs per month are \$5,000
- What will your profit be if you sell 100 of these cameras each month?

## The Term of a Lump Sum

Future Value of the Investment	\$ 1000000
Initial Investment	\$ 100000
Annual Interest Rate	14 %
Interest is paid	Annually
Term is	17.57 periods

Done X Help

## THE TERM OF A LUMP SUM

Use this worksheet to determine how long it takes an investment to grow to a given value at a specified interest rate and compounding frequency.

### Example problem:

- How many years will it take you to become a millionaire if you initially invest \$100,000 at 14% interest.

## What Int. Rate Do You Need?

Desired Future Amount	\$ 50000
Initial Investment	\$ 10000
Term	15 Years
Interest is added	Monthly
Annual Interest Rate Required is	10.7777 %

Done X Help

## WHAT INTEREST RATE DO YOU NEED?

Use this worksheet to find the interest rate required for an *Initial Investment* to reach a *Desired Future Amount*.

The *Interest is Added* (or compounded) into the investment account at regular intervals.

### Example problem:

- What *Annual Interest rate* will turn a \$10,000 investment into \$50,000 in 15 years if interest is paid monthly.

# analyze your investments

## Analyze Your Cash Flow

Initial Investment \$ **50000**

Annual Interest Rate **9** %

Net Present Value \$ **6,728.63**

Net Future Value \$ **17,362.73**

Net Uniform Series \$ **988.75**

Int. Rate of Return **11.2996** %

▪ Tap to Edit Cash Flow Entries ▪

Done Calculate Help

TECH NOTE: This worksheet assumes investments meet the following criteria— (1) Initial Investment is a cash outflow, (2) Some of the cash flows following the initial investment are positive, (3) the sequence of cash flows change signs only once, and (4) the sum of the cash flows is positive.

## ANALYZE YOUR CASH FLOW

Use this worksheet to analyze investments that involve cash flows (money paid out or received) of uneven amounts that occur on an annual basis.

The *Net Present Value* (NPV) of an investment is the present value of the expected future cash flows minus the cost or cash outflows, at a given interest rate. One of three possible results will be displayed:

1. A positive value — Revenue target exceeded, an effective investment.
2. Zero — Revenue target met.
3. A negative value — Revenue target has not been attained, an ineffective investment.

The *Net Future Value* (NFV) is the future value of all cash inflows and outflows, at a given interest rate.

The *Net Uniform Series* represents the amount that is equivalent to the series of cash flows having a PV equal to the NPV.

The *Internal Rate of Return* (IRR) is the return at which future cash flows, discounted back to today equal the initial cash outlay.

If the *Internal Rate of Return* is greater than the desired rate of return or the *Net Present Value* is positive, the investment is considered financially attractive.

### To add a cash flow item:

1. Tap the *Add* Button.
2. Enter the cash flow amount into the *Amount* field. Enter cash outflows as negative values.
3. Enter the number of times a cash flow amount occurs consecutively in the *occurrences* field.

### To insert a cash flow item:

1. Tap the item number of the cash flow item
2. Select *Insert...* from the popup menu.
3. A new cash flow entry will be inserted before the selected item.

### To delete a cash flow item:

1. Tap the item number of the cash flow item.
2. Select *Delete...* from the popup menu.

### Example problem:

- What is the *Internal Rate of Return* for an investment that requires a cash outlay of \$50,000 with annual cashflows of 3 x 5000, 4 x 10000, 0 and 3 x 15000 dollars.

## Analyze Your Cash Flow

Item	Amount	Occurrences
1	5000.00	3
2	10000.00	4
3	0.00	1
4	15000.00	3

Total: 50,000.00

Done Add Help

### Property's Capitalization Rate

Annual Rent Income	\$ 24000	
Operating Expenses	\$ 9450	
Vacancy Allowance	15	%
Market Value	\$ 150000	
The Capitalization (CAP) Rate is	7.3000	%

Done X Help

## CAPITALIZATION RATE FOR PROPERTY

Use this worksheet to calculate the capitalization rate for an investment property.

The *Capitalization Rate* is the ratio of a property's annual net operating income to its market price. You can use it to compare the returns on rental properties; the higher the capitalization rate, the greater the return, or chances of producing reliable income.

The *Vacancy Allowance* is the percentage of annual rent you may lose while the property is vacant.

#### Example problem:

- What is the *Capitalization Rate* of a duplex that has a market price of \$150,000, produces annual rents of \$24,000, costs \$9,450 a year in operating expenses, and has a 15% vacancy allowance?

### Estimate Return on Stock

Risk-Free Rate	7	%
Return on Market	8	%
The Investment's Beta Value	1.2	
Expected Return is	8.2000	%

Done X Help

## ESTIMATE RETURN ON STOCK

Use this worksheet to analyze the relationship between an investment's risk and return using the Capital Asset Pricing Model (CAPM).

The *Beta Value* is a measure of how sensitive an investment is to market movements. As the *Investment's Beta Value* increases, return (and risk) increase as well. The *Beta Value* can be positive (investment rises in value when market rises) or negative (investment drops in value when market rises).

The *Risk-Free Rate*, *Return on Market* and *Beta values* can be obtained through stock brokerage firms or publications.

#### Example problem:

- The beta value for a company is 1.2. The Risk-Free rate of return (current rate of Treasury Bill securities) is 7%. Given 333 the expected rate of return for the market as a whole is 9% what is the expected rate of return for the stock?

### Maintain Purchasing Power

Inflation Rate	3	%
Marginal Tax Rate	26	%
To maintain your purchasing power the required rate of return is	4.0541	%

Done X Help

## MAINTAIN YOUR PURCHASING POWER

Use this worksheet to determine the rate of return you need on an investment to maintain purchasing power given the effects of inflation.

To maintain your purchasing power, you must earn enough on your investment to be able to buy the same items in the future you could buy today with that amount.

#### Example problem:

- What *Rate of return* must you receive on a bond to maintain current purchasing power, assuming the inflation rate is 3% and your marginal tax rate is 26%?

## personal finance

### How Much Life Insurance?

Expenses at Death \$ 11,500.00

Beneficiary's Capital \$ 243,450.67

Life Insurance Needed \$ 254,950.67

Done



Help



#### Beneficiary's Capital

Required Income \$ 1200 /Mth

Income To Last 20 years

Investment Yield 5 %

Income Tax Rate 25 %

OK



### HOW MUCH LIFE INSURANCE

Use this worksheet to determine the amount of life insurance coverage your beneficiary may need to cover future expenses in the event of your untimely death.

A beneficiary is someone you name to receive income from your insurance policy.

*Probate costs* are the fees associated with registering and certifying a will.

The *Investment Yield* is the yearly rate your beneficiary earns on the insurance capital. The higher the yield, the less capital you need.

#### Example problem:

- How much Life Insurance do you need so that your beneficiary can receive \$10,000 cash and enough capital to have a monthly income of \$1,200 for 20 years?

### Your Net Worth

Liquid Assets \$ 133,590.00

Retirement Assets \$ 93,000.00

Investment Assets \$ 7,300.00

Personal Assets \$ 23,000.00

Total Assets \$ 256,890.

Short Term Liabilities \$ 2,300.00

Long Term Liabilities \$ 25,670.00

Total Liabilities \$ 27,970.

YOUR NET WORTH \$ 228,920.

Done



Help



### YOUR NET WORTH

Use this worksheet to record your total assets and total liabilities and to determine your net worth. Most people know their credit card balance, but not their net worth—a much more important number.

*Your Net Worth* is the difference between your *Total Assets* and *Total Liabilities*. In other words what you own minus what you owe.

This worksheet is analogous to a corporation's balance sheet and provides a snapshot of your financial situation. It is important to gain a clear picture of your net worth before developing a financial plan designed to help you reach your financial goals

## DATES AND TIMES

Use this worksheet to calculate the difference between specific dates or times.

Select the *30-Day Month* check box when you want to base the calculations on the 360-day calendar and do not have to know the exact number of days involved in the calculation.

Tap the *Beginning Date* or *Ending Date* selector button to display the Day of the Week.

Dates are calculated using the exact calendar method which assumes each year (except a leap year) has 365 days.

### Example problems:

- For how many days do you earn interest if you open a savings account on May 24th and close it December 1st?
- How many hours have you been alive?

## PERCENTAGE CALCULATIONS

Use the percentage worksheet to perform various percentage calculations. The percentage worksheet is divided into two screens: *Percentage of Total* and *Percentage Change*.

Tap the *Percent Change* tab to display the worksheet for calculating the Percentage change between an *Old Value* and a *New Value*. *Percent Change* is expressed as a percentage of the *Old Value*.

Tap the *Percentage of Total* tab to display the worksheet for calculating the percentage a *Part of Total* represents of a *Total Amount*. *Percent of total* is expressed as a percentage of the *Total Amount*.

The percentage worksheets calculate any unknown variable as long as the other two are known.

### Example problems:

- By what *Percentage Change* did your rent increase if it went from \$975 to \$1,120 per month?
- What amount of sales tax should you pay on a \$237 purchase, if the tax rate is 8%?

**Dates and Times**

Use 30-Day Month ☐

Beginning Date   
and Time

Ending Date   
and Time

Elapsed Time   
in

Done  Help

**Percentage Calculations**

Percent of Total

Old Value   
New Value

Percent Change  %

Done  Help

**Percentage Calculations**

Percent of Total

Total Amount   
Part of Total

Percent of Total  %

Done  Help



## Price for Profit!

Cost or Buy Price	\$ 378.50		
Selling Price	\$ 503.46		
Markup	33 %		
Margin	24.8196 %		
Done	X	Help	?

## PRICE FOR PROFIT!

Use this worksheet to calculate various relationships between markup, margin, selling price and cost price.

Selling Prices are often set using a *Markup* or *Margin* on a *Cost* or *Buy Price*.

The *Margin* is the gross profit rate based on the *selling price* expressed as a percentage of the selling price.

The *Markup* is the gross profit rate based on the *cost* or *buy price* expressed as a percentage of the *cost price*.

### Example problem:

- What is the appropriate *Selling Price* for an outboard motor that costs \$378.50 to make, if you want to achieve a 33% markup?

## Prices of Multi-Sized Packages

First Package Size	1000 lb		
First Package Cost	\$ 360		
Second Package Size	1 tons		
Second Package Cost	\$ 685		
Show Comparison in	tons		
Unit Cost of Package 1	\$ 720.00		
Unit Cost of Package 2	\$ 685.00		
Done	X	Help	?

## PRICES OF MULTI-SIZED PACKAGES

Use this worksheet to compare the prices of two packages, regardless of their sizes or units of measure.

### Example problems:

- Is it cheaper per pound to buy 1000 pounds of crushed granite for \$360 or 1 ton for \$685?
- Is the \$2.50 1-liter bottle of juice really cheaper than the \$3.00 1.5 quart bottle, if you compare their prices in quarts?

## Save by Buying in Bulk

Total Bulk Cost	\$ 99.99		
Number of Items	12		
Regular Price/Item	\$ 9.79		
Bulk Unit Price	\$ 8.33		
Total Savings	\$ 17.49		
Percent Savings	14.89 %		
Done	X	Help	?

## SAVE BY BUYING IN BULK

Use this worksheet to calculate the price per unit of an item sold in bulk, and to determine if you save money by buying the item in bulk rather than in single units.

### Example problems:

- What are your *Total Savings* and *Percent Savings* if you buy 12 boxes of disks for \$99.99 rather than 1 box for \$9.79?
- Is it cheaper to buy a 24-can box of soda for \$15.00 or individual cans at 70 cents each?

## Split a Bill, Tax and Tip

Base Amount	\$ 97.47
8.75 % Tax	\$ 8.53
SUBTOTAL	\$ 106
18.47 % Tip	\$ 18.00
TOTAL	\$ 124.00
Number of people	4
Amount per person	\$ 31.00

Done X Up Down Help

## SPLIT A BILL, TAX AND TIP

Use this worksheet to calculate tax, service gratuity and divide a bill evenly amongst a group of people.

Simply enter the tax inclusive *Subtotal* of the restaurant bill to have the *Base Amount* and *Tax* portions automatically calculated. This allows you to quickly verify the restaurant's Tax calculation and addition.

Tap the and buttons at the bottom of the screen to round the *Amount per person* (and *TOTAL*) up or down to the next whole dollar. The *Tip* percentage is automatically updated.

### Example problems:

- How much is the tip on a lunch bill of \$106.00 split 4 ways, if each person pays \$31.00?
- What percentage does a \$16 tip paid on top of a \$120 bar tab represent?
- How much does each person from a group of five pay on a \$230 bill with a 18% gratuity fee added?

TIP: This worksheet is also available as a free standalone application which includes extensive "Tipology 101" advice on tipping etiquette. Full details can be found at [www.landware.com/tipassistant](http://www.landware.com/tipassistant).

## buy, lease or rent?

### Compare Leases

Annual Interest Rate	4.5 %
Take Purchase Option	<input type="checkbox"/>
First Lease Cost	\$ 30,368.69
Second Lease Cost	\$ 23,944.65

Done X Compare Help

## COMPARE LEASES

Use this worksheet to compare the costs and payment features of different leases.

Tap the *First Lease Cost* button to enter the details of the first Lease. Repeat for the second Lease. If you plan to buy the item when the lease ends, tap the *Take Purchase Option* check box and enter a *Purchase option price* within the details slip of each lease.

You may also agree to make an extra *Balloon Payment* when the lease ends. On some leases, you can *Defer payments* for a specified number of periods.

Tap the *Compare* button to view a summary of the leases' costs as shown to the left.

Use the *Total PV Cost* (Present Value capitalized cost) and *Annual PV Cost* in the comparison schedule to compare the true costs of the two leases.

### Example problem:

- Which office equipment lease is better: one that requires 12 payments per year of \$900 and no down payment or security deposit, or one that requires 12 payments per year of \$700 with a down payment of \$300 and a security deposit of \$200

Item	Lease 1	Lease 2
PV Costs		
Periodic Pmts	30,369.	23,620.
Downpayment	0.	300.
Balloon Pmt.	0.	0.
Security Dep.	0.	25.
Purchase Opt.		
Total PV Cost	30,369.	23,945.
Annual PV Cost	10,123.	7,982.

OK

## Lease or Buy?

Purchase Price	\$ 20000
Term	5 Years
Residual Value	25 %
Buy Downpayment	\$ 2000
Annual Interest Rate	5.6 %
Monthly Payment	\$ 344.65
Equity at End of Term	\$ 5,000.00
Lease Downpayment	\$ 1000
Lease Mthly Payment	\$ 299
Done	X
Compare	Help

## LEASE OR BUY?

Use this worksheet to compare the costs and features of leasing versus buying.

An item's *Residual Value* is its value, expressed as a percentage of the original purchase price, after you pay off the loan.

*Equity at End of Term* is the value of the item, expressed in dollars, after you pay off the loan.

Tap the *Compare* button to view a summary of the Buy and Lease costs as shown to the left.

The *Lease versus Buy* line details the cost difference between leasing the item and buying it. A negative value indicates that Buying would be financially less desirable.

### Example problem:

- Do you pay lower monthly payments for a \$20,000 car at 6% if you buy the car or lease it for 5 years?

	Buy	Lease
Price	20,000.	20,000.
Downpayment	2,000.	1,000.
Monthly Pmt	344.	299.
Payment Total	20,679.	17,940.
Residual Value %		25.
End Term Equity	5,000.	0.
Lease versus Buy		-1,260.
OK		

## RENT OR BUY?

Use this worksheet to compare the costs and features of renting with buying a property.

The *Own/Rent Duration* is the length of time (in years) you plan to keep or rent the property.

The *Savings Interest Rate* is the rate you will earn if you invest your money rather than using it as a downpayment on the property.

Tap the *Mortgage Payment* button to enter the Mortgage details such as *Down payment*, *Interest rate* and *Term*.

The *Marginal Tax rate* is the tax rate you would have to be paid on any additional dollars of taxable income earned.

Tap the *Selling Price* button to enter the *annual appreciation* rate (the percentage by which the property value increases each year.)

## Rent or Buy?

Own/Rent Duration	5 years
Monthly Rent	\$ 700
Savings Interest Rate	5.5 %
Real Estate Price	\$ 150000
Mortgage Payment	\$ 689.63
Mthly. Property Tax	\$ 666.67
Monthly Fees	\$
Marginal Tax Rate	\$ 28
Selling Price	\$ 150,000.00
Property Resale Fees	2 %
Done	X
Compare	Help

Item	Amount
Cost of Selling	3,000.00 ↑
Net Sale Proceeds	24,187.50
Effective Yield	-12.94
RENT SUMMARY:	
Monthly Rent	700.00
Initial Investment	20,000.00
Investment/Month	310.08
Investment Yield	5.50 ↓
OK	

The *Property resale fees* are the percentage of the selling price that you must pay the real estate agent for selling the property.

Tap the *Compare* button to view a summary of the Rent verses Buy costs as shown to the left.

The *Investment/month* value on the compare schedule is the difference between Total Monthly Cost and Monthly Rent.

The *Effective Yield* value on the compare schedule is the annualized return received when you purchase the property which fully reflects the costs of ownership.

#### Example problem:

- Which would be wiser: to buy a condominium with a \$20,000 down payment and \$689 mortgage payments, or to invest the \$20,000 and rent the apartment for \$700 per month?

## savings and retirement

Plan Your Child's Tuition	
Annual Tuition Cost	\$ 6000
Enrollment Starts In	5 years
Tuition Duration	4 years
Rate of Return	4.8 %
Predicted Inflation	2.3 %
Current Savings	\$ 0
Annual Contribution	\$ 2,730.47
Done X [List Icon] Help [Book Icon]	

### PLAN YOUR CHILD'S TUITION

Use this worksheet to determine how much you must save (*Annual Contribution*) to pay for tuition in the future.

The *Rate of Return* is the annual interest rate you expect your savings to earn.

Enter a *Predicted Inflation* rate to adjust tuition costs.

If you do not have any savings, enter 0 into the *Current Savings* field.

Tap the [List Icon] button to generate the expected savings and expenditure schedule shown to the left.

Year	Interest	Balance
1	0.00	2,730.47
2	131.06	5,592.00
3	268.42	8,590.89
4	412.36	11,733.72
5	563.22	15,027.41
6	721.32	11,756.72
7	564.32	8,174.41
8	392.37	4,261.99
Total	3,257.65	
OK Show...		

#### Example problems:

- What *Annual Contribution* must you make to be able to pay \$6000 a year in tuition fees for 4 years?
- What *Current Savings* should you have if you plan to set aside \$1,000 each year to pay \$20,000 tuition in 8 years?

## Reach Your Savings Goal

Annual Yield **5.6** %  
Savings Period **3** Years

Contribution Interval **Monthly**

Starting Balance **\$ 1,003.79**

Regular Contribution **\$ 500**

Ending Balance **\$ 20000**

Balance in Today's \$ ☒

Predicted Inflation **2.3** %

Done X Help

Period	Interest	Balance
2	7.04	2,010.68
3	9.42	2,516.20
4	11.81	3,023.11
5	14.22	3,531.40
6	16.64	4,041.10
7	19.08	4,552.19
8	21.53	5,064.68
9	24.00	5,578.58

Total **1,770.76**

OK Show...

## Retire Rich!

Ann. Pension Income **\$ 10000**

Current Age **38** years

Retirement Age **60** years

Life Expectancy **80** years

Tax Rates **28% / 25%**

Inflation Factor **2.3% (adj.)**

Current Savings **\$ 166,980.23**

Annual Yield **5.5** %

Annual Contribution **\$**

Ann. Retire. Income **\$ 24000**

Done X Help

Age	Income	Balance
57	0.00	363,070.09
58	0.00	377,447.66
59	0.00	392,394.59
60	23,088.30	384,540.18
61	23,619.33	375,808.83
62	24,162.58	366,151.66
63	24,718.32	355,517.47
64	25,286.84	343,852.65

Total **578,052.77**


OK Show...

## REACH YOUR SAVINGS GOAL

Use this worksheet to determine how you can save a certain amount of money over a specified period of time.

The *Annual Yield* is the expected return (such as interest, dividends, or profit) on money you save each year.

Tap *Balance in Today's \$* to see how inflation affects the purchasing power of your money.

Tap the  button to track the expected accumulation of savings. If you enter a *Predicted Inflation* rate, this schedule also shows the increase in the contributions necessary to maintain your savings goal.

### Example problems:

- If you deposit \$500 per month for the next 3 years, what starting savings balance do you need to build your savings to \$20,000?
- What regular contribution must you make to save \$10,000 in 5 years for a new car, if you have saved \$500 already?
- What is your end savings balance if you deposit \$110 a month for 5 years?

## RETIRE RICH!

Use this worksheet to determine how you can achieve a particular income upon retirement.

*Annual Pension Income* is money you will receive upon retirement in addition to your retirement savings.

If you enter an *Inflation Factor*, the schedule shows the increase in contributions necessary to maintain your savings goal.

Tap the *Income in Today's \$* checkbox (within the *Inflation factor* details slip) to see the purchasing power your income would have today. Amounts decrease when you choose this option because inflation reduces the value of money you save for the future.

### Example problems:

- What must your *Current Savings* be to have an annual retirement income of \$24,000 for 20 years?
- What *Annual Yield* must your savings earn to have such an income, if you are able to contribute \$3,000 a year for 30 years?
- What will your *Annual Retirement Income* be if you have \$10,000 in the bank already and plan to contribute \$2,500 a year for 20 years?

## Withdraw From Savings

Principal Amount **\$ 5400**  
Annual Interest Rate **7** %  
Predicted Inflation **2.3** %

Monthly Withdrawal **\$ 912.35**  
Withdrawal Period **6** Mths

Done X  Help 

Mth.	Withdrawal	Balance
1	914.10	4,517.40
2	915.85	3,627.90
3	917.61	2,731.46
4	919.36	1,828.03
5	921.13	917.56
6	922.92	0.00


Total 5,510.96

OK Show...

## WITHDRAW FROM SAVINGS

Use this worksheet to determine how much you can withdraw regularly from your savings or the number of months you can withdraw a particular amount.

Enter a *Predicted Inflation* rate to adjust the withdrawal amounts so they reflect the impact of inflation.

Tap the  button to generate a schedule of expected withdrawal events.

### Example problems:

- How much can you Withdraw each month if you are earning 7% interest on \$5,400 and you would like your savings to last 6 months?
- For what *Withdraw Period* can you withdraw \$700 from a retirement savings account holding \$25,000?