Unit #7

Math and Finances

Name _____

Date _____

Period _____

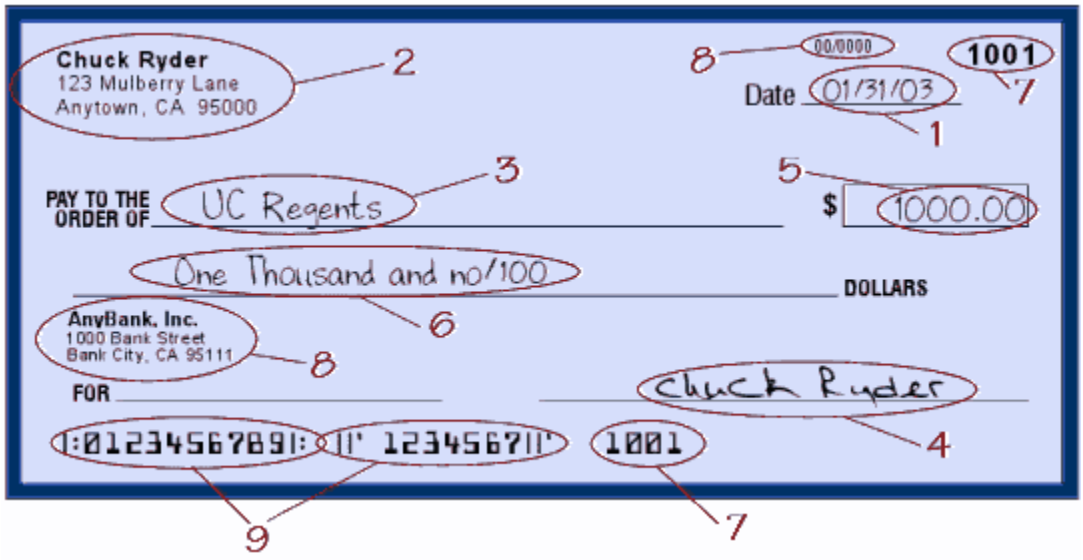
Day 1 - The Information on a Check

A check is a payable, on demand item which means it is negotiable as soon as it is written. **Checks *cannot* be post dated (written for a future date).**

Stale Date

A check is stale dated **six months** after it is written or **after the negotiable date** on the check. Stale dated checks will be returned by the bank as "non-negotiable - stale dated". They are no longer any good. **Do not wait too long to cash your checks.**

Anatomy of a Check



1. **Date** - the date the check is written (cannot be a future date)
2. **Maker** - person/business who writes the check - the name will be printed on the check
3. **Payee** - person/business to whom the check is written
4. **Signature line or lines** - two or more signatures can be required on a check
5. **Written amount** - the numerical amount
6. **Legal amount** - the amount in English words, this one counts!
7. **Check number** - which is printed on the check and appears in the MICR line on the bottom of the check
8. **Banking information** - both the name of the bank and the American banking Association number appear on the check
9. **Account and routing numbers** - appear on the bottom of the check in MICR line.

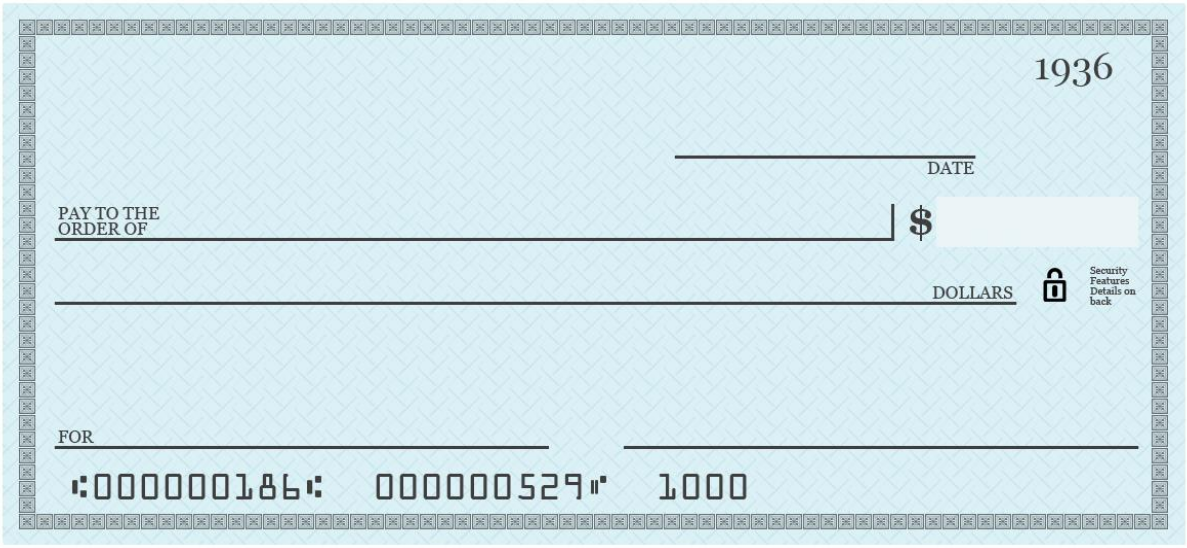
*** Some of the information may be in a slightly different spot depending on the company who makes the checks.

The information on this page was taken from http://cashier.ucmerced.edu

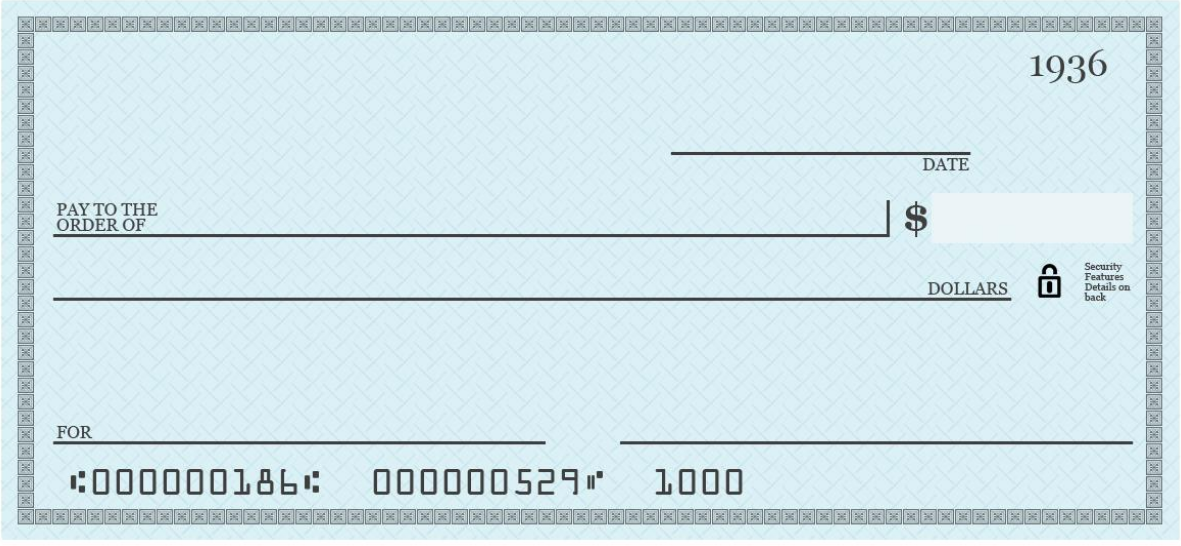
Practice Writing Checks

Fill out each check with the given information.
Note: The maker, bank information, and check number are not included on these check templates.

1. Susan Smith wrote a check to Bargains Groceries for $142.76 on May 17th, 2021 for her weekly grocery bill.



2. On October 3rd, 2021 Jeremiah Stevens wrote a check to his cousin, Michaela Stevens, for $35.00 for her birthday.



Day 2 - Checkbook Registers

A checkbook register is a place to record all of the deposits, transfers, and withdrawals for your checking account. You should record the following transactions in your checkbook register in **chronological order**:

1. Checks you write
2. Deposits into your checking account
3. Withdrawals from your checking account including **ATM** withdrawals
4. Transfers to or from your checking account from another account
5. Bank fees (most checking accounts today are free)

A checkbook register has labeled columns. Look for each of these headings in the checkbook register on the next page.

Number: This column is only used when you write a check. Record its number here.

Date: The date of each transaction should be recorded here.

Transaction Description: For each transaction, write yourself a note so you will remember what it was for later. For example, if you wrote took money out of the ATM to pay for sneakers, write "sneakers" on the description line. If you are depositing a paycheck, write the word "paycheck" as well as the dates for the paycheck in this column.

Payment/Fee/Withdrawal (-): This is where you should record the amount of any transaction where money is leaving your account.

Deposit/Credit (+): This is where you should record the amount of any transaction where money is going into your account.

Q: When should I record my transactions in the checkbook register?

A: As soon as they happen. You just won't remember what happened later. You could forget the date, the amount of the transaction, or the transaction itself. It is not a good idea to rely on a receipt to help you remember to record it later. You will waste time looking for the receipt, and you might lose it altogether.

In addition, do the math right away too. You want to make sure your account does not run out of money. Bouncing a check will cost you.

NOTE: In real life, you would want to record these transactions as they happen. This is not realistic for the classroom setting, so we will do the whole register at once.

1) Starting Balance (Write this underneath the word **Balance** in the last column): Your balance on February 1st is $562.33.
2) You write a check (#115) on February 4th for $55.00 made out to your high school. The check is for an upcoming field trip to a Broadway Musical.
3) You deposit your paycheck for the weeks of 1/25-2/7 for $110.75 on February 10th.
4) Your credit card bill is due on February 14th, so on February 11th you write a check (#116) to Credit America for $76.10.
5) Your birthday is February 18th, and you deposit the check your grandmother sent you in the mail for $40.00 on that day.
6) On February 23rd, you go to a football game and run out of money. You find a local ATM and make a $50.00 withdrawal.
7) Your brother, Ted, owes you $37.00. She pays you back on February 25th, and you deposit the money in to your checking account that day.
8) You withdraw $25.00 from the ATM for dinner and a movie with friends on February 27th.
9) You deposit your paycheck for 2/8-2/21 for $107.65 on February 28th.
10) Your Uncle Jim, forgot your birthday, but he sent you a check a couple of weeks late. You deposit his $25.00 check on March 1st.

Check No.	Date	Transaction Description	Payment/ Fee/ Withdrawal (-)	Deposit/ Credit (+)	$ Balance

Day 3 - Reconciling your Checkbook Register

Each month when you receive a **bank statement**, you should check it against your checkbook register. This will help you make sure your register is accurate and up to date. You should look for any mistakes you have made and correct them immediately. There is also a possibility that the **bank could have made an error**, and you want to catch it as soon as possible.

Some **common errors** you might have made include simple calculation errors such as adding instead of subtracting or missing a transaction. The most commonly missed transactions are ones that do not involve checks such as ATM withdrawals, debit card purchases, or deposits. These are easy to forget because you may not have your checkbook with you.

Before you check for any of these errors, you should see if all of your **checks have been cleared**. For example, if you write a check for rent, but your landlord has not yet deposited it, it will be written in your register but not on the monthly bank statement. This is because the money has not yet come out of your account. The items on the bank statement might not be in the same exact order as your register for the same reason.

It would be a pain to go through and fix a mistake on your register right where it is because you would have to change every number below it as well. It is easier to **make changes at the bottom of the register and draw an arrow** to where the mistake was made. For example, if you missed writing an ATM withdrawal, you can write the change at the end and draw an arrow to the place in the register where the withdrawal should have been based upon its date.

On the next page you will practice reconciling a checkbook register. You will not have a bank statement to use for comparison, but the important information from the bank statement is listed in the bullets at the top of the page.

You have filled in the following checkbook register over the past month. When you received your monthly bank statement, you checked it with this record. You noticed that the bank said you should have $1511.58 in your account. Now you must find the errors in your register.

- You notice that check #313 is not listed on your monthly bank statement because it has not cleared yet. This means that your checkbook register will have _____ less than your bank statement. Therefore, after you fix your checkbook register, it should say you have 1511.58 - _____ = _____.
- You notice that you wrote check number #309 for 34.43 to Pets' Palace on March 7th, but you forgot to record it. Fill in that information on your register.
- You also notice that you made an ATM withdrawal on March 16th for $40.00 and did not record that either.
- There are two more errors in calculations. Find them and make the changes at the bottom of the register.

Check No.	Date	Transaction Description	Payment/Fee/ Withdrawal (-)	Deposit/ Credit (+)	Balance
		Balance			1295.99
308	2/28/08	Grocery World	88.34		- 88.34
					1207.65
	2/28/08	Deposit: Paycheck		33.99	+ 33.99
					1241.64
	3/01/08	Monthly Service Fee	5.00		- 5.00
					1191.64
	3/02/08	Deposit: Money for Birthday		50.00	+ 50.00
					1241.64
310	3/10/08	Chad's Clothing	112.74		- 112.74
					1128.90
311	3/10/08	Right Place Pharmacy	37.89		- 37.89
					1091.01
	3/15/08	Deposit		80.00	- 80.00
					1011.01
312	3/15/08	Rent	550.00		- 550.00
					461.01
	3/15/08	Pay Check: Direct Deposit		970.00	+ 970.00
					1431.01
313	3/22/08	Gas Outlet	27.14		- 27.14
					1403.87
	3/27/08	ATM Withdrawal	50.00		-50.00
					1353.87

Day 4 – Compound vs. Simple Interest

Compound interest means that you are making (or paying) interest on the interest that accumulates. Most loans, mortgages, investments, and credit cards work this way.
This is in contrast to **simple interest** where you make (or pay) interest only on the initial amount you put in the bank (or borrow from the bank).
Before learning how technology can help us calculate compound interest, we are going to learn how it works.
Let's look at a simple example comparing compound interest with simple interest.

	Compound Interest – 5%	Simple Interest – 5%
Starting Amount	$100	$100
1 year	Starting Amount: Interest: Total Amount: One step calculation:	Starting Amount: Interest: Total Amount:
2 years	Starting Amount: Interest: Total Amount: One step calculation:	Starting Amount: Interest: Total Amount:
3 years	Starting Amount: Interest: Total Amount: One step calculation:	Starting Amount: Interest: Total Amount:
4 years	Starting Amount: Interest: Total Amount: One step calculation:	Starting Amount: Interest: Total Amount:
5 years	Starting Amount: Interest: Total Amount: One step calculation:	Starting Amount: Interest: Total Amount:

	How could you start from 100 and find out how much you would have in 5 years in one step using compound interest? Hint: For the one step calculation, each time you multiplied by _____. Therefore you multiplied by this number _____ times. What would be a shorter way of writing this?	How could you start from $100 and find out how much you would have in 5 years in one step using simple interest?
	General Formula for Compound Interest: ☐	General Formula for Simple Interest: ☐
For the following rows, use the general formula to see how much each investment would make long term.		
10 years		
20 years		
30 years		

Day 5 - Visualizing simple and compound interest

Simple Interest is an example of **linear growth** because the bank account will grow by the same amount each year. You can see this with a graph.

Example: You put $400 in a bank account with 7% interest. Fill in the table with how much you will have in the account if you leave the money in the bank for 1, 5, 10, 15, 20, 25 and 30 years. Graph your results.

Equation for this situation:

YEAR (t)	Amount in Account (A)
0	400
1	
5	
10	
15	
20	
25	
30	

Compound Interest is an example of **exponential growth**. You can see that the bank account grows by more and more each year because it is growing on an increasing amount. A graph is also helpful to see this relationship.

Example: You put $400 in a bank account with 7% compound interest. Fill in the table with how much you will have in the account if you leave the money in the bank for 1, 5, 10, 15, 20, 25 and 30 years. Graph your results.

Equation for this situation:

YEAR (t)	Amount in Account (A)
0	400
1	
5	
10	
15	
20	
25	
30	

For each of the following problems, complete the calculations for the interest rates with both simple and compound interest. Find the difference between the two calculations. Round to the *nearest cent* or the *nearest year*.

A. Let's say you invested $550 in a bank account with an interest rate of 4% per year.

1) 1 year
   a. Simple:
   b. Compound:

   c. Difference:

2) 8 years
   a. Simple:
   b. Compound:

   c. Difference:

3) 40 years
   a. Simple:
   b. Compound:

   c. Difference:

B. Let's say you invested $7,000 in a bank account that gets an APR of 5.9%.

1) 5 years
   a. Simple: Amount from interest:

   b. Compound: Amount from interest:

   c. Difference:

2) 30 years
   a. Simple: Amount from interest:

   b. Compound: Amount from interest:

   c. Difference:

3) Using compound interest, how long would it take you to make 20,000?

   Using simple interest, how long would it take for your initial investment to double?

C. Let's say you invested $15,000 in a bank account that has an APR of 3.5%.

1) 4 years
   a. Simple: Amount from interest:
   b. Compound: Amount from interest:
   c. Difference:

2) 20 years
   a. Simple: Amount from interest:
   b. Compound: Amount from interest:
   c. Difference:

3) Using simple interest, how long would it take you to make $20,000?

4) Using compound interest, how long would it take for your initial investment to triple?

D. Let's say you invested $1,000 in a bank account that gets an APR of 2.5%.

1) 1 year
   a. Simple: Amount from interest:
   b. Compound: Amount from interest:
   c. Difference:

2) 8 years
   d. Simple: Amount from interest:
   e. Compound: Amount from interest:
   f. Difference:

3) Using simple interest, how long would it take you to make $1,500?

4) Using compound interest, how long would it take for your initial investment to double?

Day 6 - Real Life Situations with Compound Interest

(Round to the *nearest cent* or the *nearest year*)

1) You are planning to buy a house for $220,000. You need to save up enough to make a 10% down payment.
   a. How much do you need for the down payment?

   b. If you invest $15,000 in an account that gets 5.5% compound interest each year, how long will it take you to save up enough money to make the down payment?

2) You take out a loan for your freshmen year of college for $22,000. The loan has a compound interest rate of 9%. How much has the loan grown to when you start to pay it off after four years?

3) You invest the $2,000 you got for graduation into an account with 4% compound interest in order to get a better car. The car costs $12,000 and you plan to make a 25% down payment when you buy it.
   a. How much do you need for the down payment?

   b. When will you be able to get the car?

4) You are planning to buy a house for $190,000. You need to save up enough to make a 15% down payment.
   a. How much do you need for the down payment?

   b. If you invest $18,000 in an account that gets 6.2% compound interest each year, how long will it take you to save up enough money to make the down payment?

5) You take out a loan for your freshmen year of college for $16,500. The loan has a compound interest rate of 7.5%. How much has the loan grown to when you start to pay it off after six years when you finish graduate school?

6) You invest the $3,300 you got for graduation into an account with 8% compound interest in order to get a better car. The car costs $22,999 and you plan to make a 20% down payment when you buy it.

   a. How much do you need for the down payment?

   b. When will you be able to get the car?

Day 7 - Why should I pay off my credit card?

Every year you and your neighbor carry the $**5000 limit** on your credit cards with **20% APR**.

You also each make an **extra $2000** to spend on fun things. Since you both have the credit card debt, you each pay **$1000 of your extra $2000 to pay off the interest** on your credit card leaving you with **$1000 left over for extra spending money**.

You made a New Year's resolution for 2012. From now on, at the beginning of each year, you **pay off $500 of your credit card balance**. This will mean you have to **sacrifice some of your spending money**, but is it worth it?

Your neighbor continues to leave his credit card maxed out year after year.

Calculate the end of the year balance, much money you pay for interest (balance * .20), and the amount left for extra spending money.

**The three starred columns of your table and your neighbor's table should add up to $2000 because that is the extra amount of money you have each year.

		You				Your Neighbor			
	Year	*Amount Paid Towards Balance	End-of-Year **Balance** on Card	* Interest Paid (20% of **Balance**)	* Extra Spending Money	*Amount Paid Towards Balance	End-of-Year **Balance** on Card	* Interest Paid (20% of **Balance**)	* Extra Spending Money
0.	2011								
1.	2012								
2.	2013								
3.	2014								
4.	2015								
5.	2016								
6.	2017								
7.	2018								
8.	2019								
9.	2020								
10.	2021								
11.	2022								
12.	2023								

1) Who has more money to spend on stuff for the first few of years?

2) For how many years does this last?

3) Look at questions 1 and 2. How much more **total** did that person have to spend on stuff for that number of years? (Find the differences and add them up).

4) Describe what happened after that?

5) How much more do you have to spend on stuff than your neighbor per year starting after year 10?

6) In the first ten years, you still had to spend a total of _____ on interest.

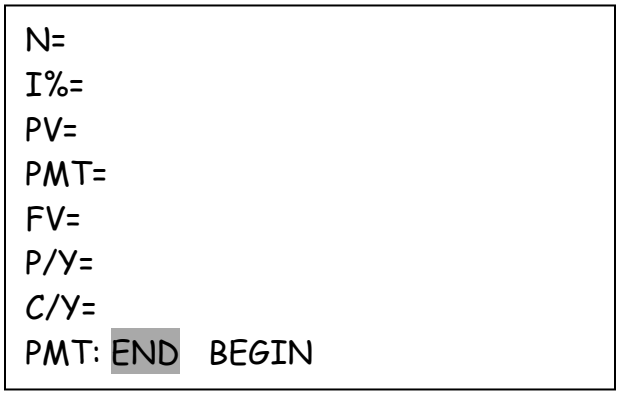
7) What could you do to avoid this whole situation?

Day 8 -Finances and the TVM Solver

Getting to the financial application:

APPS→#1→#1

The screen should look like this.
Write what each abbreviation stands for:



To Solve: Put the cursor on the variable you are trying to find and press ALPHA ENTER.

In the car unit, we used this application to find out how much money you had to pay each month for different car loans. This is just one way to use the financial application.

Key Points:

Money leaving you is negative: _____

_____

Money you are getting is positive: _____

_____

C/Y and P/Y will always be 12. That means all interest and payments are done monthly.

END will always be highlighted on the bottom where it says PMT.

You will either be looking for N, PMT, PV, or FV. Read the problem and fill in what you know to see what you are solving for.

Using the TVM Solver for Investments

For pages 17-23, round to the *nearest cent*, *nearest tenth of a year*, or *nearest tenth of a month or payment*.

1. Let's say you want to invest $10,000 you have saved up in an account that gives 4% interest per year. You also plan to put another $50 in the bank each month for ten years. How much would you have in the bank after 10 years? (Remember, you are **giving** 10,000 to the bank, so it should be a **negative number**).

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

2. You are saving for college and you want to have $40,000 within the next five years. If you start with $3,000 in an account that gets 4.7% interest, how much will you have to put in the bank each month to reach your goal?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

3. You are saving for college and you want to have $50,000 in the bank before you go. If you start with $10,000 in an account that gets 5.25% interest and you put another $500 in the account each month, how long will it take you to reach your goal: Months? Years?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

4. Let's say you want to invest $500 you have saved up in an account that gives 3.25% interest per year. You also plan to put another $120 in the bank each month for five years. How much would you have in the bank after 5 years?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

5. You are saving $7,000 for a car within the next two years. If you start with $500 in an account that gets 3.9% interest, how much will you have to put in the bank each month to reach your goal?

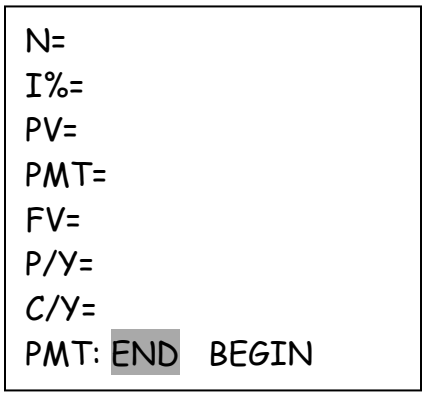
N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

6. You are saving $12,000 for a car. If you start with $500 in an account that gets 3.45% interest and you are able to invest $200 a month, how long will it take you to reach your goal: Months? Years?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

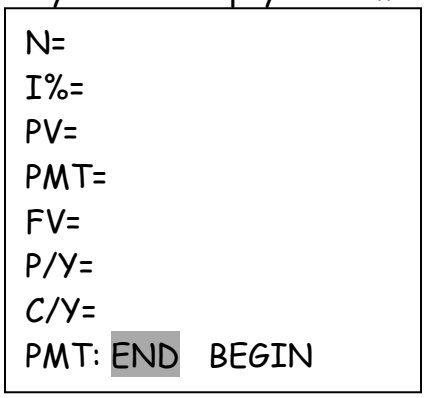
Using the TVM Solver for Loans: Credit Cards or Mortgages

1) Let's say your credit card is maxed out. This means that you have reached your $2000 credit limit. You decide to make the minimum payment of $40 a month. If your credit card charges 17% interest, how many payments do you need to make to pay it off?



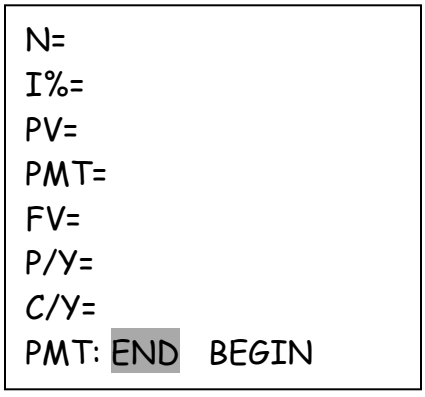
What is the total amount you spent paying it off? ($40·N).

2) You took out a 30 year mortgage for $250,000 with an interest rate of 6.1%. How much do you have to pay each month for the mortgage?



What is the total cost of the mortgage?

3) Your family can afford payments of $1400 a month for mortgage. If interest rates are around 6.5% and they want a 30 year mortgage, what is the largest mortgage they can afford?



4) You have $5,000 worth of credit card debt that you would like to pay off in a year. The card has an interest rate of 16%. How much should you pay each month to pay it off?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

How much did you spend on the credit card altogether?

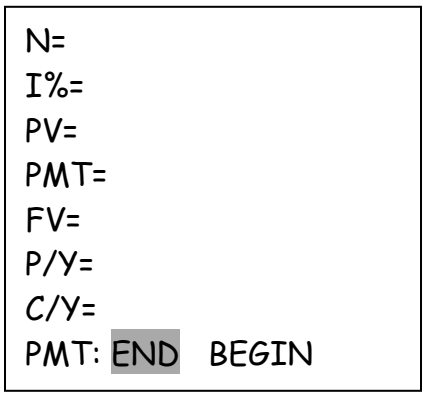
5) You have $13,000 worth of credit card debt that you would like to pay off within 5 years. The card(s) have an interest rate of 14%. How much should you pay each month to pay it off in five years?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

How much did you spend on the credit card altogether?

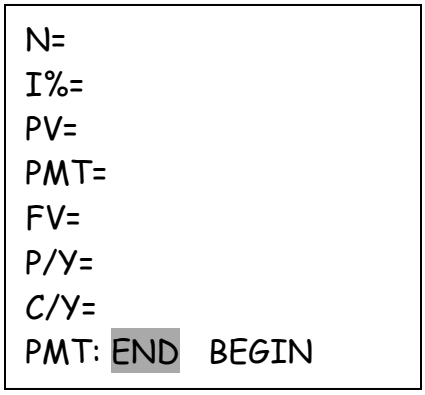
More TVM Solver

1) A couple has picked a house that they want to buy, and they need to borrow $120,000 to make the purchase. Erica finds them a 30-year mortgage at 8 percent. What will the monthly mortgage payments be?

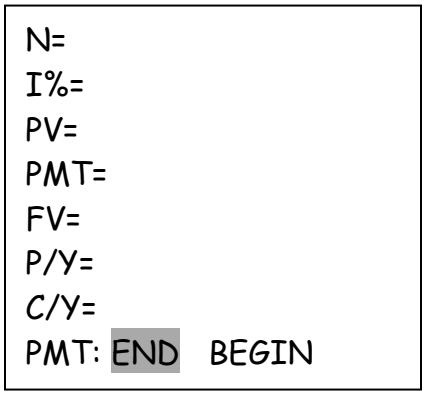


- How much will the couple in the first problem end up paying for their house if they make 360 payments of the amount you found?

2) Let's say your friend put $3500 into a bank account that gives 5.2% interest per year. He does not add any extra money each month. How much would he have in the bank after 5 years?



3) Let's say you put $3500 into a bank account that gives 5.2% interest per year. Unlike your friend, you also planned to put another $50 in the bank each month for the next 5 years. How much would you have in the bank after 5 years?



- How much more money do you have than your friend (question #2) at the end of the five years?

4) A family of five needs a bigger house. They ask Erica to find them a 30-year mortgage for $165,000 that is affordable. She finds a 7.25 percent mortgage rate for families. How much will their monthly payments be?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

5) Let's say you have $4500 in credit card debt. You decide to make a payment of $250 per month to pay it off. If your credit card charges 8% interest, how many payments do you need to make to pay it off?

- What is the total amount you spent paying it off?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

6) A pair of newlyweds calculate that they can afford $1050 per month in mortgage payments. Erica finds a first time buyer loan for 30 years at 8.25%. How much can they afford to borrow for the house at this rate?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

7) You start saving for a car, and you want $2,000 for a down payment. You found an account with 4.75% interest. Would you be able to reach your goal faster if you start with an empty account and added $100 each month, or if you put $1000 in the bank and added $50 each month?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

8) A young family has recently increased their income and wants to move into a bigger home. They like a house for which they would have to borrow $215,000. Erica offers them a 15-year mortgage at 6.75% or a 30-year mortgage at 7.75%. What would their monthly payments be with each loan?

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

N=
I%=
PV=
PMT=
FV=
P/Y=
C/Y=
PMT: END BEGIN

9) Make up your own problem and solve it. Choose a situation that could really happen in your future life.

_____
_____
_____
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N=
I%=
PV=
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FV=
P/Y=
C/Y=
PMT: END BEGIN

Day 9 - Reading Stock Tables

In this lesson, we will be learning how to read stock tables that you would find in a financial newspaper or online. The following alphabetical list of terms will help you read these tables.

1) **Close:** The last trading price recorded when the market closed.

2) **Day's Range (Hi/Lo):** The highest and lowest trading prices on that day.

3) **Dividend Per Share (DIV):** The yearly dividend payment for each share for a company. Not all companies give out dividends.

4) **52wk Range (52Week Hi/Lo):** The highest and lowest trading prices in the past year.

5) **Last Trade:** This is the most recent price the stock was traded for. This amount is updated continuously on online financial websites.

6) **Net Change:** The difference between the previous day's closing price and the current day's closing price.

7) **Market Cap:** A measure of the value of a company found by multiplying the total number of shares of a company by the current price per share.

8) **Open:** The price of the stock for the first trade of the day. Trading opens at 9:30 a.m. Eastern Standard Time.

9) **Previous Close**: The price at the last trade before closing on the previous day.

10) **Price/Earnings Ratio (P/E):** Stands for Price/Earnings Ratio, calculated by dividing the current stock price by earnings per share from the last four quarters. (Making decisions based on the Price/Earnings Ratio is an advanced skill outside of the scope of this course.)

11) **Ticker Symbol (SYMBOL):** Each stock has a three or four letter abbreviation. For example, the ticker symbol for Microsoft is MSFT. Use the ticker symbol to search for the stock online.

12) **Volume (VOL):** How many shares of the stock the company has traded that day.

13) **Yield (YLD or YIELD %):** The ratio between the dividend per share and the current price per share, measured as a percent.

There are many other stock terms that are not listed above. If you encounter a new term either in this unit or your future life, you can find out more about it by searching online.

Reading Stock Tables:

Below is a sample stock table. Use the definitions on the previous page to answer the questions that follow.

52 W High	52 W Low	Stock	Ticker	Div	Yield %	Vol 00's	High	Low	Close	Net Change
46.39	20.75	American Auto	AAUT			3841	43.00	40.51	42.50	-1.90
10.63	2.55	American Bakeries	ABAK			527	5.09	4.90	5.09	+0.12
87.25	65.13	American Electricity	AELC	2.7	3.7	268	72.75	71.25	72.74	+0.03
18.44	11.75	American Health	AHLT	.5	3.5	32062	14.50	14.20	14.31	+0.21
83.36	61.18	American Tech	ATEC	1.02	1.4	5406	72.51	71.50	71.50	-0.42

1) What is the ticker symbol for American Electricity?

2) What is the highest price anyone has paid for American Bakeries over the past year?

3) None of the stocks set new lows for the past 52 weeks. Which stock's closing price is closest to its 52 week low?

4) Not all stocks give out dividends. That is why American Auto and American Bakeries do not have anything in the Dividend or Yield % columns.

   a. If American Bakeries had a dividend of $0.25, what would be its yield % to the nearest *tenth of a percent*? Use your definitions on the previous page to help you.

   b. If American Auto had a dividend of $2.10, what would be its yield % to the nearest *tenth of a percent*? Use your definitions on the previous page to help you.

   c. You should get similar amounts for the previous two questions. Why are these numbers so close even though the dividend amounts are very different?

5) Which stock sold the most shares on this day? How many?

6) Which stock closed at its lowest price of the day?

7) Which stock's price fluctuated the most over the past year? How much?

8) Which stock's price fluctuated the most on this day? How much?

9) Which stocks closed at a lower price today compared to yesterday?

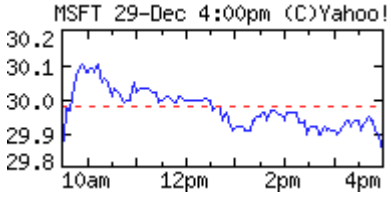
Day 10 - Stock Information on the Web

While stock quote tables and graphs in newspapers are still used to share information, more and more people are going to the web to find out the latest news on the stocks they own. The tables and graphs on each website are a little different, so it is important to be flexible in your ability to read the charts. I cut and pasted a couple of these tables to this word document. Read each one and answer the questions.

A. This is a summary chart of the Microsoft Corporation.

After Hours: **29.88** ↑0.02 (0.07%)

Last Trade:	**29.86**	Day's Range:	29.83 - 30.15
Trade Time:	Dec 29	52wk Range:	21.46 - 30.26
Change:	↓0.12 (0.40%)	Volume:	41,757,262
Prev Close:	29.98	Avg Vol (3m):	57,836,800
Open:	29.85	Market Cap:	293.54B
Bid:	29.61 x 10000	P/E (ttm):	23.87
Ask:	30.14 x 10000	EPS (ttm):	1.25
1y Target Est:	32.04	Div & Yield:	0.40 (1.30%)



1) What is the ticker symbol for Microsoft?

2) What was the lowest the stock has sold for in the past year?

3) Did the stock open today at more or less than it closed at yesterday?

B. This is a table of the top five "stocks on the rise" in terms of the volume sold.

Stock Symbol	Price*	Price Chg	Vol % Chg
BUCY	64.50	+1.95	+365
RDY	28.43	+0.63	+263
LDSH	24.11	+0.51	+252
MDCC	32.61	+1.13	+139
SCHK	44.98	+1.68	+137

4) How much did the SCHK stock go up in the past day?

5) What was the volume percent change for BUCY? If the BUCY stock sold a volume of 2,000 shares yesterday, how many shares were sold today?

C. This is another example of a stock table on the internet.

Symbol	Name	Last Trade		Change		Volume
INTC	INTEL CORP	23:59:53	20.61	-0.74	-3.47%	116,649,006
QQQQ	NASDAQ-100 INDEX TRACKING STOCK	23:59:53	41.21	-0.33	-0.79%	81,770,143
JDSU	JDS UNIPHASE CORP	23:59:53	3.06	+0.11	+3.73%	71,735,967
DELL	DELL INC	23:59:53	30.38	-1.58	-4.94%	68,759,718
SUNW	SUN MICROSYSTEMS INC	23:59:53	4.3	-0.07	-1.60%	49,068,524
AMAT	APPLIED MATLS INC	23:59:01	19.72	-0.24	-1.20%	42,116,316
MSFT	MICROSOFT CORP	23:59:31	26.7	-0.11	-0.41%	41,513,193
CSCO	CISCO SYS INC	23:59:53	19.86	-0.12	-0.60%	35,965,898
ORCL	ORACLE CORP	23:59:53	12.4	-0.04	-0.32%	35,536,011

6) How much did Microsoft stock sell for on the last trade?

7) How much did this change from yesterday's closing price? Express your answer in terms of money and as a percent.

8) How is the volume column different than the one in your packet on page 25?

9) Which stock has the highest price per share?

D. The following chart includes values for the different **markets** of interest. While investors are interested in specific stocks, the general trend of the market is usually similar to the trends for many individual stocks within the market.

S&P	Dow Jones	NASDAQ	Nikkei
1,287.24	11,115.32	2,282.36	15,713.45
-2.14 (-0.17%)	-5.36 (-0.05%)	-12.27 (-0.53%)	-330.22 (-2.06%)

Hang Seng	FTSE 100	10 Yr Note	Crude Oil
15,475.69	5,846.20	4.541	61.29
24.81 (0.16%)	17.3 (0.30%)	-0.055 (-1.20%)	1.16 (1.93%)

10) What is the current value of NASDAQ?

11) Is this an increase or decrease from yesterday? By how much?

12) Which markets had a positive change from yesterday?

E. This stock table is for General Motors.

GM detailed pricing and financial information.

Metric	Value
Bid:	N/A
Ask:	N/A
Day's Low & High:	21.83 - 22.80
Open:	22.50
Previous Close:	22.28
Volume:	10,477,500
Avg. Volume:	17,629,624
Market Capitalization:	12,396.15 M
52-week range:	18.33 to 37.70
1 week change:	⬆0.22%
1 month change:	⬆9.32%
1 year change:	⬇41.23%
P/E:	-1.47

13) On this table, there are three additional pieces of information that seem to be helpful in making decisions about stocks. What are they?

F. The internet also gives more in depth information on any stock you choose. The following information refers to stock for Apple Inc.

(The image above was taken from Google Finance).

14) What does the graph represent? What is the general trend in the price of this stock over the past year?

15) What was the lowest price over the past year? Estimate when this occurred.

16) What was the highest price? Estimate when this occurred.

17) What was the range of prices today?

18) There are many terms on this chart that you probably do not know (EPS, Shares, Beta, etc.). This will happen since each internet site is different. What could you do in these cases?