******

***Credit Cards***

******

***The Good***

******

***The Bad***

******

***The Ugly***

**1 Gertrude the Good, Billy the Bad and Ivan the Ugly – Calculate the interest costs**

**2 Shopping for Credit - Credit Card Comparisons – Terminology**

**3 The Credit Card Statement**

**4 Do’s and Don’ts of Credit**

***Money Language***

***The Not So Heart Warming Tale of Billy and Bob***

Billy (the kid) always had money, but no one really knew where he got his money. As it happened, Billy’s brother, Bob, needed money, and it was particularly urgent, so he asked his brother for a loan of $100. Billy was in the business of making money and he charged his brother 10% interest. Bob thought, “no problem” I just have to pay Billy back $110 which is $100 of **principal** plus $10 of **simple** **interest**. “Easy” thought Bob.

Billy, however, did not mean **simple** **interest** he charged **compound interest**, specifically; he charged 10% compounded daily. For example on the first day, Bob would owe Billy $110 (the same as simple interest). If he did not pay, the second day Billy would charge him 10% interest on $110, which is an additional $11 for a total of $121. By the third day, when 10% was added to the $121 from the day before, Bob would owe $133.10. Bob was fighting mad when he found out what compound interest meant.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Bob Thought (simple interest)*** | | | ***Billy’s Plan (compound interest, compounded daily)*** | | | |
| ***Amount*** | ***Interest*** | ***Total*** | ***Day*** | ***Amount*** | ***Interest*** | ***Total*** |
| *$100* | *10%* | *$110* | *1* | *$100* | *10%* | *$110* |
|  |  |  | *2* | *$110* | *10%* | *$121* |
|  |  |  | *3* | *$121* | *10%* | *$133.10* |

***Interest:*** Money that **is charged** when you borrow funds or money **you receive** for funds that you deposit or invest. Interest rates are usually presented as a % rate such as 3%.

***Principal:*** The amount of funds that is borrowed or deposited.For example if I borrow $100 and I have to pay 3% more when I repay the loan, the principal is $100 and the interest is 3%.

***Simple Interest:*** The amount of interest that is paid or earned on the principal only.

***Compound Interest:*** The amount of interest that is paid or earned on the principal plus the previous interest.

**Moral of the Story:** When you borrow money in modern times, you can end up with some similar mis-understanding so learn about credit and money before you apply for products or loans. Ask about Garth’s missing Grace Period story if you want an example.

***Credit Cards, The Good The Bad and The Ugly***

***Gertrude The Good Credit Situation***

Gertrude wants to buy a bike, but she is a saver not a spender so she takes time to research different bikes in different stores. While she is shopping, she is saving her money. Gertrude has $700.00 saved when she notices the bike she has picked out is on sale for $200.00 off. She buys the bike for **$1000.00** using her credit card which has an Annual Percentage Rate of **21%.** The next day she goes on-line and using her savings she pays **$700.00** of the purchase off. Payday is in two days so she takes **$300.00** out of her check and pays off the rest of the credit card. Because she used a reward card she received 200 Airmiles for her purchase.

1. How much money will Gertrude pay in interest charges? $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Billy The Bad Credit Situation***

Billy is really excited to get a new stereo for his car. He has good speakers, equalizer and other components but his player is outdated and does not work with MP3’s. He has a credit card that has an Annual Percentage Rate of interest **at 21%.** He jets down to the electronic store and charges **$1000.00** for the new MP3 / CD player to his card. He does not have a lot of money to pay off the debt so he decides to pay $30.00 per month (the minimum hi\s card will allow).

1. How many months will it take to pay off the debt? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. How much will Billy pay for the stereo by the time he pays it off? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the cost to finance Billy’s stereo? (interest costs) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Ivan the Ugly Credit Situation***

Ivan works for Blackberry a cell phone hardware and software developer in Canada. He worked hard at Blackberry but did not keep very good personal records, and most months he spent all of the money he makes. In September he bought a flight and an all-inclusive weekend for one person in Mexico using his credit care and charged **$1000.00** with an Annual Rate of Interest at **21%.** In October, Blackberry laid off half of their workforce including Ivan. His unemployment insurance is 55% of his wage and he works out that he could squeeze out $20.00 per month to pay his credit card, and he has to negotiate this with his company as his payment is less than the minimum. He hopes to get a new job but because many people in his town were employed by the same employer he cannot sell his house and he cannot find any employer nearby. He may be living on his Employment Insurance for some time.

1. How many months will it take to pay off the debt? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. How much will Ivan pay for the vacation by the time he pays it off? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the cost to finance this trip to Mexico? (interest costs) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use the credit calculator at [www.practicalmoneyskills.ca](http://www.practicalmoneyskills.ca) to get the answers

Understanding Identity Theft

**What is Identity Theft?**

Identity theft occurs when someone steals your personal information to take over your credit accounts, open new ones, take out a loan, rent an apartment, access bank accounts, or commit many other crimes using your identity.  When it strikes, the effects can be devastating.  What's more, because it frequently involves no physical theft, identity theft may not be noticed by its victims until significant damage has been done - potentially several months and thousands of dollars later.  
  
**How do identity thieves do it?** First, they may steal your personal information by...

* Going through your mail or trash, looking for bank and credit card statements, pre-approved credit offers, and tax information.
* Stealing personal information from your wallet or purse such as identification, credit, or bank cards.
* Completing change-of-address forms to redirect your mail.
* Acquiring personal information you share on unsecured sites on the Internet.
* Buying personal information about you from an inside source -- for example, a store employee that gets your information from a credit application or by "skimming" your credit card information when you make a purchase.
* Getting your personnel records at work.
* By being family members, roommates, or close friends that have access to your personal information.

**Then they may exploit your personal information by...**

1. Opening new credit card accounts using your **name, date of birth, and Social Security Number**. When they use the credit cards and don't pay the bills, the delinquency is reported on your credit report.
2. Establishing phone or cellular service in your name.
3. Opening a bank account in your name and writing bad checks on the account.
4. Counterfeiting checks or debit cards, and draining your bank account.
5. Buying cars by taking out auto loans in your name.
6. Calling your credit card issuer and, pretending to be you, changing the address on the account. Bills get sent to the new address, so you don't realize there's a problem until you check your credit report.
7. Filing for bankruptcy using your name to avoid paying debts they've incurred under your name.

By [brand](http://www.equifax.com/)

**How to Prevent Identity Theft**

http://www.transunion.com/images/global/spacer.gif  
Preventing identity theft starts with managing your personal information carefully and sensibly. We recommend a few simple precautions to keep your personal information safe:

http://www.transunion.com/images/global/spacer.gif

* Only carry essential documents with you.
* Do not carrying extra credit cards, your Social Security card, birth certificate or passport with you outside the house.
* Keep new checks out of the mail.

When ordering new checks, you can prevent identity theft by picking them up at the bank instead of having them sent to your home.

* http://www.transunion.com/images/global/spacer.gifBe careful when giving out personal information over the phone.

Identity thieves may call, posing as banks or government agencies. To prevent identity theft, do not give out personal information over the phone unless you initiated the call.

* http://www.transunion.com/images/global/spacer.gifYour trash is their treasure.

To prevent identity theft, shred your receipts, credit card offers, bank statements, returned checks and any other sensitive information before throwing it away.

* http://www.transunion.com/images/global/spacer.gifMake sure others are keeping you safe.

Ensure that your employer, landlord and anyone else with access to your personal data keeps your records safe.

* http://www.transunion.com/images/global/spacer.gifStay on top of your credit.

Make sure your credit reports are accurate and that you [sign up for a credit monitoring service](http://www.transunion.com/personal-credit/credit-management/credit-monitoring.page), which can alert you by email to changes in your credit report – a helpful way to prevent identity theft.

* http://www.transunion.com/images/global/spacer.gifProtect your Social Security Number.

To prevent identity theft, make sure your bank does not print your Social Security Number on your personal checks.

* http://www.transunion.com/images/global/spacer.gifFollow your credit card billing cycles closely.

Identity thieves can start by changing your billing address. Making sure you receive your credit card bill every month is an easy way to prevent identity theft.

* http://www.transunion.com/images/global/spacer.gifKeep a list of account numbers, expiration dates and telephone numbers filed away.

If your wallet is stolen, being able to quickly alert your creditors is essential to prevent identity theft.

* http://www.transunion.com/images/global/spacer.gifCreate passwords or PIN numbers out of a random mix of letters and numbers.

Doing so makes it harder for identity thieves to discover these codes, and makes it easier for you to prevent identity theft.

http://www.transunion.com/images/global/spacer.gif

Now that you know more about how to prevent identity theft, get your credit report & score.

By 

# Practical Money Skills

# Identity Theft

When your private financial information gets into the wrong hands, the consequences can be devastating. If you should fall victim to identity theft, it is important that you act quickly. Contacting the correct agencies and filing the necessary reports will go a long way toward minimizing any damage to your financial well-being.

#### Who to Contact

**Credit Bureaus:** Immediately contact the fraud departments of each of the credit bureaus listed below. Alert them that you are a victim of identity theft, and request that a fraud alert be placed in your file.

Ask each agency to send you a copy of your credit report. You can also request a security freeze, preventing credit issuers from obtaining access to your credit files without your permission. This prevents thieves from opening up new credit cards.

Contact these credit bureaus in Canada:

* **Equifax Canada Inc.**  
  Consumer Relations Department   
  Box 190 Jean Talon Station   
  Montreal, Que.   
  H1S 2Z2  
  1-800-465-7166

* **TransUnion Canada**  
  P.O. Box 338, LCD 1  
  Hamilton, Ont.  
  L8L 7W2  
  1-866-525-0262, 905-525-0262

**Law Enforcement:** Report identity theft to your local police department. If the crime occurred somewhere other than where you live, you may wish to report it to law enforcement there as well. The police will create an "identity theft report" and give you a copy.

#### Agencies Offering Additional Support

Finding yourself the victim of identity theft is stressful, but there is help out there for you.

**Privacy Commissioner of Canada:** For advice on privacy issues related to the identity theft (Personal Information Protection and Electronic Documents Act-PIPEDA) contact the Privacy Commissioner of Canada (1-800-282-1376 or [www.privcom.gc.ca](http://www.privcom.gc.ca/)). Quebec, British Columbia, and Alberta all have separate privacy laws that are similar to PIPEDA, so if you live in one of these provinces, contact the corresponding Provincial Commissioner.

**Consumer Measures Committee Identity Theft Kit:** For advice on what to do if you think you are a victim of identity theft, visit the Office of Consumer Affairs Consumer Measures Committee online tool at <http://cmcweb.ca/eic/site/cmc-cmc.nsf/eng/fe00084.html>.

**What Should You Replace?** Consider replacing your ID cards like health, driver's license, or SIN by calling 1-800-O-Canada. An agent will be able to direct you to the appropriate federal and provincial organization to replace each of your cards.

**Trouble with Your Mail?** If your mail is missing, contact Canada Post at [www.canadapost.ca](http://www.canadapost.ca/) (1-800-267-1177).

**Background Notes ……………………………**

# - Periodic Interest Rate

REVIEWED BY BEVERLY BIRD,  Updated Mar 31, 2019

### **What Is a Periodic Interest Rate?**

A periodic interest rate can be charged on a loan or realized on an investment over a specific period of time. Lenders typically quote interest rates on an annual basis, but the [interest compounds](https://www.investopedia.com/terms/c/compound.asp) more frequently than annually in most cases. The periodic interest rate is the annual interest rate divided by the number of compounding periods.

**[Important: A greater number of compounding periods allows interest to be earned on or added to interest a greater number of times.]**

### **How a Periodic Interest Rate Works**

The number of compounding periods directly affects the periodic interest rate of an investment or a loan. An investment's periodic interest rate is 1% if it has an effective annual return of 12% and it compounds every month. Its periodic interest rate is 0.00033, or the equivalent of 0.03% if it compounds daily.

The more frequently an investment compounds, the more quickly it grows. Imagine that two options are available on a $1,000 investment. Under option one, the investor receives an 8% annual interest rate and the interest compounds monthly. Under option two, the investor receives a 8.125% interest rate, compounded annually.

By the end of a 10-year period, the $1,000 investment under option one grows to $2,219.64, but under option two, it grows to $2,184.04. The more frequent compounding of option one yields a greater return even though the interest rate is higher in option two.

### **Example of a Periodic Interest Rate**

The [interest on a mortgage](https://www.investopedia.com/terms/m/mortgageinterest.asp) is compounded or applied on a monthly basis. If the annual interest rate on that mortgage is 8%, the periodic interest rate used to calculate the interest assessed in any single month is 0.08 divided by 12, working out to 0.0067 or 0.67%.

The remaining principal balance of the mortgage loan would have a 0.67% interest rate applied to it each month.

### **Key Takeaways**

* Lenders typically quote interest rates on an annual basis, but the interest compounds more frequently than annually in most cases.
* Interest on mortgages usually compounds monthly.
* Credit card lenders typically calculate interest based on a daily periodic rate so the interest rate is multiplied by the amount the borrower owes at the end of each day.

### **Types of Interest Rates**

The annual interest rate typically quoted on loans or investments is the **nominal interest rate**—the periodic rate before compounding has been taken into account. The **effective interest rate** is the actual interest rate after the effects of compounding have been included in the calculation.

You must know a loan's nominal rate and the number of compounding periods to calculate its [effective annual interest rate](https://www.investopedia.com/terms/e/effectiveinterest.asp). First, divide the nominal rate by the number of compounding periods. The result is the periodic rate. Now add this number to 1 and take the sum by the power of the number of compounding interest rates. Subtract 1 from the product to get the effective interest rate.

For example, if a mortgage compounds monthly and has a nominal annual interest rate of 6%, its periodic rate is 0.5%. When you convert the percentage to a decimal and add 1, the sum is 1.005. This number to the 12th power is 1.0617. When you subtract 1 from this number, the difference is 0.0617 or 6.17%. The effective rate is slightly higher than the nominal rate.

Credit card lenders typically calculate interest based on a **daily periodic rate**. The interest rate is multiplied by the amount the borrower owes at the end of each day. This interest is then [added to that day's balance](https://www.investopedia.com/ask/answers/040315/what-does-it-mean-when-interest-accrues-daily.asp), and the whole process happens again 24 hours later—when what the borrower owes is typically more unless he's made a payment because now his balance includes the previous day's interest. These lenders often quote an annual percentage rate (APR), glossing over this [daily periodic rate calculation](https://www.consumerfinance.gov/ask-cfpb/what-is-a-daily-periodic-rate-on-a-credit-card-en-46/). You can identify your daily periodic rate by dividing the APR by 365, although some lenders determine daily periodic rates by dividing by 360.

### **Special Consideration**

Some revolving loans offer a "[grace period](https://www.fdic.gov/regulations/laws/rules/6500-3200.html)" from accumulating interest, allowing borrowers to pay off their balances by a certain date within the billing cycle without further interest compounding on their balances. The date and duration of your grace period, if any, should be clearly identified in your contract with the lender.