The Math of Credit Cards

When you use a credit card to make a purchase, you are borrowing money for a short period of time. Whenever you borrow money, there is a cost. This cost is INTEREST.

Understand your Statement

- 1. Balance from Last Statement The amount owed from your previous statement
- 2. Total Purchases Add up the new charges made on the account not including interest
- 3. Total Interest/Services Charges Write in the interest paid from previous bill
- 4. Total Cash Advances Amount taken from ATM using your credit card
- 5. Total Payments/Credit Amount paid on last bill
- 6. **Statement Balance** Add up #1, 2, 3, 4 to get a total. Subtract #5 from this total to get your final balance.
- 7. Credit Limit The total amount of money you may spend on your credit card
- 8. *Minimum Payment Percentage* The percentage of your *Statement Balance* that you need to pay in order to maintain good credit

Calculating Credit Still Available

- Calculate your *Statement Balance*
- Subtract the *Statement Balance* from the *Credit Limit* (bottom right hand corner)
- The answer is your *Credit Still Available*

Calculating Minimum Payment

- Look on statement to find what the Minimum Payment Percentage is
- Convert percentage to a decimal by dividing by 100
- Multiply your *Statement Balance* by the decimal
- The answer is your *Minimum Payment*

Calculating Interest

$$I = PRT$$

I: is the amount of money you owe in interest (\$)

• This is what you are calculating – nothing to fill in here!

P: is the unpaid Statement Balance (\$)

• Look at what you owe on your bill this month

R : is the interest rate of the card (as a decimal)	<u>Example</u>
1. Find your interest rate for purchases	1) 17.5%
2. Turn this percent to a decimal by \div 100	2) 17.5% ÷ 100 = 0.175

T: is the number of days you owe interest on.

- Calculate the number of days interest is paid on. Typical months have 30 days.
- Convert your time into years by dividing by 365 keep 4 decimal places

<u>Example</u>

- 1) 30 days in the month
- 2) 30 ÷ 365 = 0.0822



Example 1. Alice has a TD Cash Back credit card. She received her October bill and owes \$2044.38.

a) Calculate her minimum payment.

b) Alice wants to know what her interest charges will be if she can't pay the bill this month. She plans to use the formula I = PRT to do this calculation. Help her decide what numbers to use.

I =

P =

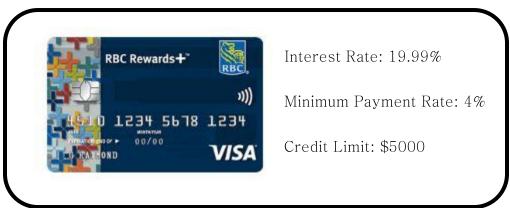
R =

T =

c) Calculate the Interest owed this month.

d) How much credit is still available on this credit card?

Practice



- 1. Tony has an RBC Rewards Visa. He received his November bill and owes \$1875.65
- a) Calculate his minimum payment.

b) Tony wants to know what his interest charges will be if he can't pay the bill this month. He plans to use the formula I = PRT to do this calculation. Help him decide what numbers to use.

I =

P =

R =

T =

c) Calculate the Interest owed this month.

d) How much credit is still available on this credit card?



- 2. Sam has BMO Air Miles Mastercard. He received his December bill and owes \$452.14
- a) Calculate his minimum payment.

b) Sam wants to know what his interest charges will be if he can't pay the bill this month. He plans to use the formula I = PRT to do this calculation. Help him decide what numbers to use.

| =

P =

R =

T =

c) Calculate the Interest owed this month.

d) How much credit is still available on this credit card?