Introduction to Credit Cards

Use the words from the following word box to complete the statements in the next two sections below:

<table>
<thead>
<tr>
<th>bills</th>
<th>cash advances</th>
<th>daily interest</th>
<th>rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>buyer</td>
<td>charges</td>
<td>full merchant</td>
<td>seller</td>
</tr>
</tbody>
</table>

**How Do Credit Cards Work?**
- The customer **buyer** presents the credit card to the merchant **seller**
- The merchant **charges** the credit card company for the cost of the item
- The credit card company **bills** the customer's credit card for the amount

**How Do Credit Card Companies Make Money?**
1. Charge the customer **interest** if the bill amount is not paid off in **full**
2. Charge the customer immediate interest on **cash advances**
3. Set high interest **rates** and compound interest **chili** on unpaid balances
4. Charge the **merchant** a small amount (2-3%) for each purchase made

Let's discuss some advantages and disadvantages of credit cards:

**Advantages**
- do not need to carry cash
- provide additional fraud protection
- rewards/points
- buy now, pay later
- shopping online

**Disadvantages**
- security (can be stolen)
- high interest rates
- you can end up with a lot of debt (people use credit card and can't pay)
- surcharges

**Making Credit Card Payments & How Credit Card Companies Charge Interest**
- From the time your bill arrives companies offer a **21 day** grace period before they charge interest (any interest charged is added to your next bill)
- If you pay your balance IN FULL by the due date you will not **pay any interest**
- Credit card companies REQUIRE you to make a **minimum** payment
- The **minimum payment** is usually a **percentage** of your balance (i.e. 5%) **OR** a set amount (i.e. $20) whichever is MORE
- If you do not pay your bill IN FULL (pay all of it by the due date):
  - Simple interest is charged from the date of **purchase** until the due date of the bill
  - After that, interest is **compounded daily** until the balance is paid off
Credit Card Payments and Interest Examples

Suppose you buy a $545 bike using your credit card on March 2. No other purchases are made on your credit card.

a) If you receive your bill on March 15 what will be the due date on the bill?

b) If your credit card company requires a minimum payment of 4% of your balance or $20, whichever is more, what would be your minimum payment due?

\[
545 \times 0.04 = 21.80
\]

$c) If you forget to pay your bill until April 10, at which time you pay the entire balance, how much interest will be charged to your bill?

\[
\text{Simple Interest } I = Prt
\]
\[
I = 545 \times 0.18 \times \frac{34}{365}
\]
\[
I = 9.14
\]

\[
\text{Compound Interest } A = P \left(1 + \frac{i}{n}\right)^{nt}
\]
\[
A = 554.14 \left(1 + \frac{0.0043}{365}\right)^{365 \times 6}
\]
\[
A = 555.51
\]

When choosing credit cards- look for lower interest rates and rewards programs.

Example of Rewards Program:

A credit card company offers 2% cash back on all purchased. Over time, how much will you need to spend to get $50 cash back.

\[
x(0.02) = 50
\]
\[
x = \frac{50}{0.02} = 2500
\]