Mathematics

Science, Mathematics

Mathematics: Open/Closing Credit The credit card will largely depend on the credit card holder purchasing behavior. Your current card charges 16. 5% annually. Therefore, interest charges on a balance of $5, 000 will be given by:

This is the interest charged on your current card, regardless of the duration. On the other hand Visa Student Card charges a lower annual percentage of 10. 8% after a 6 month 0% interest period. On a balance of $5, 000, the interest will be;

Obviously, the student card charges a lower interest compared to your current card and even offers a grace period of 6 months interest free which makes it an attractive option. However, since you usually have a large outstanding balance, chances of defaulting or exceeding the credit limit under the Student Card will lift your interest to 24. 8%. This will increase the interest charged beyond the current card option. So it is advisable to remain with your current credit card.

Simple Interest

For example, you want to purchase the latest LG 65 inch curved TV screen worth $9, 000. Clearly, paying all the $9000 at once is not easy, so you take out the other option. Based on the terms specified on the assignment, the store will charge you a 10% down payment and 12 equal monthly instalments paid at the end of each month.

The down Payment is equivalent to 10% of the price of the TV.

To get the interest charged on the remaining balance:

We get the remaining balance:

This is the remaining amount you have to pay for you to exclusively own the

LG TV, but since the appliance store has made it easier for you to pay the $8, 100 over duration of 12 months, they charge a simple interest on it.

The simple Interest is given by the formula:

Therefore, at 15% interest rate, interest paid on the remaining balance is:

So you have to pay $1, 215 on top of $8, 100 for you to exclusively own the TV (Bluman, 2007).

Furthermore, to get the monthly payment, you add the remaining balance to the interest paid and then divide the resultant value with the number of installments.

References

Bluman, A. G. (2007). Business math demystified. New York [etc.: McGraw-Hill.