INTERE$T-ing Thing About Credit Cards…

Credit cards are powerful tools for managing money. However, according to a 2009 study by Sallie Mae, college students have an average of $3173 of credit card debt. Graduating college seniors enter the workforce with an even higher average of $4100. In addition to the balances, high annual percentage rates (APR), can complicate students’ efforts to pay off their debt.

In this project, you will investigate the effect of compound interest on the balance of a credit card and will formulate a strategy for how you will use your first credit card.

Research

- Research some basic facts about credit cards online. How do they work? How are payments made? What affects the APR a customer is offered on a card?
- Research some of the pros and cons of using a credit card.
- Explore ways to obtain and use your first credit card. What factors should you consider when applying for a credit card? What types of purchases should you make with a credit card?

Select

A typical APR for a credit card for a student is between 13-17%, but rates can be considerably lower or higher. Locate two offers for credit cards, one that offers an APR lower than 13.99% and one that offers an APR higher than 13.99%. These offers may come as applications that are mailed to a family member or offers found on the Internet.

Analyze

Analyze the effect that different APRs have on credit card balances according to the attached financial guidelines.

Create

Display a summary of your analysis. Include your strategy for how you will use your first credit card.
# Financial Guidelines

Attach these guidelines to your analysis.

1. You receive a credit card your freshman year in college with an APR of 13.99% that is compounded monthly. Write an equation for the amount owed \(A\) for a time period of \(t\) and a principal of \(P\).

   2 pts: correct equation
   0 pt: incorrect equation

   ____ / 2

2. Suppose you immediately charge $1000 on this credit card and decide not to make any payments. Ignoring any late fees, calculate your credit card balance after each time period.

   - one year
   - two years
   - three years
   - four years
   - six years
   - eight years
   - ten years
   - twenty years

   2 pts: correct calculation
   0 pt: incorrect calculation

   ____ / 16

3. Two credit card offers, one with an APR lower than 13.99% and one with an APR greater than 13.99%, are provided.

   1 pt: Offers are provided.
   0 pt: Offers are not provided

   ____ / 2

4. Repeat Steps 1 and 2 using the APRs from the two offers that you found.

   For Step 1:  
   1 pt: correct equation
   0 pt: incorrect equation

   For Step 2:  
   1 pt: correct calculations
   0 pt: incorrect calculations

   ____ / 18

5. Sketch graphs of the balances for each of the credit cards on the same coordinate plane. Include:

   - a title,
   - labels for the x- and y-axes,
   - appropriate intervals for the axes,
   - a key, and
   - an accurate sketch of each graph.

   9 pts: Includes all components.
   -1 pt: for each omitted component

   ____ / 9

6. A summary about your first credit card is provided and includes:

   - the factors you will look for when applying for a credit card,
   - the purchases you plan to make with it, and
   - the balance you plan to carry from month to month.

   3 pts: Includes factors, purchases, and balance.
   -1 pt: for each omitted component

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Total Points

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Chapter 7 Rubric

INTEREST-ing Thing About Credit Cards…
What Do You Think?

Financial Literacy
What are some of the advantages and disadvantages of using a credit card?

Critical Thinking
How can mathematics be used to make wise financial decisions?