2.2 Exploring Credit Card Use

GOAL

Compare credit options that are available to consumers.

EXPLORE the Math

Jayden saw the new sound system he wanted on sale for $2623.95, including taxes. He had to buy it on credit and had two options:

- Use his new bank credit card, which has an interest rate of 14.5%, compounded daily. (Because this credit card is new, he has no outstanding balance from the previous month.)
- Apply for the store credit card, which offers an immediate rebate of $100 on the price but has an interest rate of 19.3%, compounded daily.

As with most credit cards, Jayden would not pay any interest if he paid off the balance before the due date on his first statement. However, Jayden cannot afford to do this. Both cards require a minimum monthly payment of 2.1% on the outstanding balance, but Jayden is confident that he can make regular monthly payments of $110.

? Which credit card is the better option for Jayden, and why?

Reflecting

A. Share your solution and the strategy you used to solve the problem with classmates. Was there more than one way to approach the problem? Are there advantages to using one strategy rather than another?

B. Jayden could make smaller payments each month or he could pay a different amount each month, as long as each payment is at least 2.1% of the outstanding balance. Why would he choose to make regular payments of $110 instead?

C. With a partner, decide which credit card, his new bank card or the store card, would be the better option if the conditions were changed as described below. Provide your reasoning.
  i) The store credit card offers an immediate rebate of $200, instead of $100.
  ii) The store credit card offers an immediate rebate of $200, instead of $100, and has an interest rate of 20.3%, compounded daily.
  iii) The store credit card offers an immediate rebate of $200 and has an interest rate of 20.3%, compounded daily. Jayden's new bank credit card has an interest rate of 13.5%, instead of 14.5%, compounded daily.

D. In loan or credit situations, the interest charged is the cost of borrowing. In Jayden's situation, can you decide which credit card is better simply by comparing the interest charged? Explain.

In Summary

Key Ideas

- Incentives or promotions are sometimes offered to entice people to use credit cards. For example, an immediate cash rebate may be offered on the first purchase using a credit card. Low interest rates, rewards, or no annual fees may also be offered.
- The full cost of borrowing should be considered before making a decision about using a credit card. This includes the total interest charged, as well as the total payments and the time it will take to pay off the balance.

Need to Know

- Credit cards usually have a minimum amount that must be paid each month, based on a percent of the outstanding balance. If there is no outstanding balance from the previous month and the new balance is paid off in full by the payment due date, no interest is charged.
- If a credit card does not have an outstanding balance and it is used for a single purchase, it can be treated as a loan. The purchase price is the principal borrowed, and regular payments can be made until the balance is paid off.
- The cost of using credit is not just the amount of interest charged. There are incentives, such as cash rebates, that reduce the principal. This may end up costing more in interest but result in a lower total loan payment amount.

FURTHER *Your Understanding*

1. Mia is buying a used trailer for $5000 on credit. She plans to travel through the Rockies over the summer. She can afford payments of $200 each month and is considering these two options:
   - The dealership credit card at 15.8%, compounded daily, and an immediate rebate of 2.4% off her first purchase
   - A bank loan at 9.8%, compounded monthly
   a) How much would Mia end up paying, in total, with each option?
   b) How much interest would she pay for each option?
   c) How long will it take her to pay off the balance for each option?
   d) What should she use: the credit card or the bank loan? Why?

2. Hannah goes to Blue Quills First Nations College in St. Paul, Alberta. She needs to fly home to Whitehorse, Yukon, next week for a wedding. The ticket costs $2150.66, and she intends to use credit to pay for it. She can afford payments of $200 monthly, and she has two credit cards she could use. Which credit card should she use? Explain.
   - Card Blue charges 18.5%, compounded daily. At the end of each year, she gets a 3% cash rebate on all new purchases.
   - Card Red offers an interest rate of 16.25%, compounded daily.

3. Annie and Peter live in Uluhaktok, on Victoria Island, Northwest Territories. They order most of their groceries from a supply company, which ships the groceries by barge in the summer. Annie and Peter's grocery order totals $3678, and the shipping cost is $785. They can afford to pay $400 each month. Whose credit card should they use?
   - Annie's credit card charges 15.5%, compounded daily. It has an annual fee of $75, which is added to the balance at the beginning of the year.
   - Peter's credit card charges 18.7%, compounded daily.

4. Shannon is buying a computer that costs $1186 on credit. She can afford regular payments of $125 each month and has these two credit cards to choose from:
   - Card A charges 8.9%, compounded daily, with an annual fee of $25.
   - Card B charges 14.9%, compounded daily, with an annual fee of $50.
   The annual fee is added to the first month's balance on both cards.
   a) For each card, how much would she pay, in total, to buy the computer?
   b) Which incentive below would make card B a more attractive choice than card A?
      i)   An immediate rebate of $75
      ii) 1% cash back on all purchases at the end of each year
      iii) No annual fee