## Applications

Credit cards are like snakes: Handle 'em long enough, and one will bite you.
-Elizabeth Warren, U.S. senator

1. How might the quote apply to what you have learned?

Use the FlashCard statement to answer Exercises 2-7.

2. How many purchases were made during the billing cycle? 4
3. What is the sum of all purchases made during the billing cycle? $\$ 1,227.24$
4. When is the payment for this statement due? June 8
5. What is the minimum amount that can be paid? $\$ 30$
6. How many days are in the billing cycle? 30
7. What is the previous balance? $\$ 420.50$
8. Rollie has a credit card with a credit limit of $\$ 4,000$. He made the following purchases: $\$ 425.36, \$ 358.33, \$ 377.11$, and $\$ 90.20$. What is Rollie's available credit? $\$ 2,749$
9. Rebecca has a credit limit of $\$ 6,500$ on her credit card. She had a previous balance of $\$ 398.54$ and made a $\$ 250$ payment. The total of her purchases is $\$ 1,257.89$. What is Rebecca's available credit? $\$ 5,093.57$
10. The APR on Leslie's credit card is currently $21.6 \%$. What is the monthly periodic rate? $1.8 \%$
11. Sheldon's monthly periodic rate is $1.95 \%$. What is the APR? $23.4 \%$
12. Lea has a credit limit of $\$ 2,000$ on her credit card. Each month, she charges about $\$ 200$ and makes a payment of $\$ 125$.
a. Estimate the number of months that Kea can continue this pattern until she reaches her credit limit. 27
b. Consider that part of the $\$ 125$ Yea pays each month will be for finance charges. How will the number of months from part a be affected by these charges? The number of months will be less than 27.

## TEACH

Have students work on Exercises 2-7 with a partner or in a small group. Walk around the room listening to the discussion that ensues. Misconceptions about terms and procedures may surface that you will need to address before assigning any further exercises.

## Exercises 2-7

Exercises 2-7 lead students through the completion of the statement through a guided approach. An incorrect answer in the early stages here could affect the subsequent answers.

## ANSWERS

1. Senator Warren warns us of the potential dangers of credit cards. Suggests that credit cards are intended to take advantage of consumers.

## TEACH

## Exercises 14-18

This cluster of exercises focuses on the summary section of the credit card statement. Consider completing Exercise 13 with the entire class before assigning the remaining problems.

## ANSWERS

14a. \$200
14b. \$1,358.73
14c. \$1,381.31
14d. \$3,618.69
13. Examine this portion of the credit card summary.
a. Express the sum of the cycle's daily balances algebraically. WX
b. Express the monthly periodic rate as an equivalent decimal without the $\%$ symbol. $\frac{y}{1200}$
14. Fill in the missing amounts for $a-d$. See margin.

| ACCOUNT INFORMATION |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Revolving | Account Number 2349876590 |  | Billing Date 16 Aug |  | Payment Due Date 1 Sep |  |
| TRANSACTIONS |  |  |  |  |  | DEBITS / CREDITS (-) |  |
| 6 AUG | Meghan's Shop |  |  |  |  |  | \$85.63 |
| 7 AUG | Payment |  |  |  |  |  | -\$63.00 |
| 8 AUG | Joe's Italian Restaurant |  |  |  |  |  | \$47.60 |
| 10 AUG | University of New York |  |  |  |  |  | \$855.00 |
| 15 AUG | SkyHigh Airlines |  |  |  |  |  | \$370.50 |
| 16 AUG | Payment |  |  |  |  |  | \$137.00 |
| SUMMARY | Previous Balance | Payments 1 Credits | New Purchases | Late Charge | Finance Charge | New Balance | Minimum Payment |
|  | \$215.88 | a. | b. | \$0.00 | \$6.70 | C. | \$25.00 |
| Total Credit Line <br> Total Available Credit |  | $\begin{array}{r} \$ 5,000.00 \\ \text { d. } \end{array}$ |  | Average Daily Balance | \# Days in Billing Cycle | APR | Monthly Periodic Rate |
|  |  | \$446.41 | 30 | 18\% | 1.5\% |

15. Examine the summary section of the monthly credit card statement below. Use the first five entries to determine whether the new balance is correct. If it is incorrect, write the correct amount. Incorrect; it should be $\$ 388.01$

| SUMMARY | Previous <br> Balance | Payments <br> /Credits | New <br> Purchases | Late <br> Charge | Finance <br> Charge | New <br> Balance | Minimum <br> Payment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\$ 359.02$ | $-\$ 80.00$ | $\$ 103.65$ | $\$ 0.00$ | $\$ 5.34$ | $\$ 548.01$ | $\$ 18.00$ |

16. Check the new balance entry on the monthly statement below by using the first five entries. If the new balance is incorrect, write the correct amount. Correct

| SUMMARY | Previous <br> Balance | Payments <br> Chredits | New <br> Purchases | Late <br> Charge | Finance <br> Charge | New <br> Balance | Minimum <br> Payment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\$ 424.41$ | $-\$ 104.41$ | $\$ 103.38$ | $\$ 23.00$ | $\$ 7.77$ | $\$ 454.15$ | $\$ 54.00$ |

17. A credit card statement is modeled by the following spreadsheet. Entries are made in columns A-F. Write the formula to calculate the available credit in cell G2. $=$ F2 $2-(\mathrm{A} 2-\mathrm{B} 2+\mathrm{C} 2+\mathrm{D} 2+\mathrm{E} 2)$

|  | A | B | C | D | E | F | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Previous <br> Balance | Payments | New <br> Purchases | Late <br> Charge | Finance <br> Charge | Credit <br> Line | Available <br> Credit |
| 2 |  |  |  |  |  |  |  |

18. Determine the amount of the payment made on the following credit card. $\$ 250$

| SUMMARY | Previous <br> Balance | Payments <br> /Credits | New <br> Purchases | Late <br> Charge | Finance <br> Charge | New <br> Balance | Minimum <br> Payment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\$ 939.81$ |  | $\$ 125.25$ | $\$ 3.00$ | $\$ 15.38$ | $\$ 833.44$ | $\$ 25.00$ |

19. The previous balance after the last billing cycle is represented by $A$, recent purchases by $B$, payments by $C$, finance charge by $D$, late charge by $E$. Express the relationship among the variables that must be true in order for the new balance to be $\$ 0.00 . A+B+D+E=C$
