$\qquad$ Date $\qquad$
$\qquad$

## 7-1

## Calculating the New Balance in Your Charge Account

When you use a credit card, or charge account, you receive a monthly statement detailing all of the items you bought during a one-month period. When you do not pay that balance off in full, your credit card company adds a finance charge to your bill. This is interest you must pay on your delayed payment.

## Example

Find the new balance.
Alisha Whitehall's credit card statement showed a previous balance of $\$ 217.58$, a finance charge of $\$ 2.26$, new purchases totaling $\$ 141.37$, and a payment of $\$ 50$. What is her new balance?
Find the new balance.
Previous Balance + Finance Charge + New Purchases - (Payments + Credits) $=$ New Balance $\$ 217.58+\$ 2.26+\$ 141.37-\$ 50=\$ 311.21$ new balance

## Practice

Find the new balance.
1.

| Billing <br> Date | Previous <br> Balance | Finance <br> Charge | New <br> Purchases | Payments <br> \& Credits | New <br> Balance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $07 / 15 / 20--$ | $\$ 165.00$ | $\$ 2.50$ | $\$ 150.00$ | $\$ 100.00$ |  |
| $02 / 21 / 20--$ | 254.47 | 3.18 | 129.82 | 200.00 |  |
| $05 / 18 / 20--$ | 953.54 | 5.38 | 246.75 | 350.00 |  |
| $10 / 08 / 20--$ | $1,627.61$ | 19.53 | 497.23 | $1,050.00$ |  |

5. Iris Johana's credit card statement shows a previous balance of $\$ 52.19$. She made a purchase totaling $\$ 48.84$, had a finance charge of $\$ 0.68$, and made a payment of $\$ 50.00$. What is her new balance?
6. William Battles received his monthly credit card statement. The previous balance was $\$ 226.83$ and he made a payment of $\$ 200.00$. He had a finance charge of $\$ 1.72$ and new purchases totaling \$97.51. What is his new balance?
7. Standardized Test Practice Andreas Illeana's credit card statement shows a previous balance of $\$ 437.51$. He had new purchases in the amounts of $\$ 176.22$ and $\$ 52.48$. There was a finance charge of $\$ 1.94$. He made a payment of $\$ 250.00$ and there was a $\$ 45.95$ credit for returned merchandise. What is his new balance?
A. $\$ 372.20$
B. $\$ 464.10$
C. \$368.32
D. $\$ 964.10$
$\qquad$
$\qquad$

## 7-2 <br> Calculating Finance Charge by Unpaid-Balance Method

Another method that credit card companies use to determine your finance charges is the unpaidbalance method. With this method, your finance charge is computed based on the portion of your previous balance left unpaid.

## Example

Find the new balance.
Alisha Whitehall's credit card company uses the unpaid-balance method to compute finance charges. Her statement shows a previous balance of $\$ 217.58$, new purchases totaling $\$ 141.37$, and a payment of $\$ 50.00$. If the periodic rate is 1.25 percent, what is her new balance?

1. Find the unpaid balance.

Previous Balance - Payments = Unpaid Balance
$\$ 217.58-\$ 50.00=\$ 167.58$ unpaid balance
2. Find the finance charge.

Unpaid Balance $\times$ Periodic Rate $=$ Finance Charge
$\$ 167.58 \times 0.0125=\$ 2.09$ finance charge
3. Find the new balance.

Previous Balance + Finance Charge + New Purchases $-($ Payments + Credits) $=$ New Balance $\$ 217.58+\$ 2.09+\$ 141.37-\$ 50.00=\$ 311.04$ new balance

## Practice

For Problems $1-4$, the periodic rate is 1.75 percent.

|  | Previous <br> Balance | Payments <br> and Credits | New <br> Purchases | Unpaid <br> Balance | Finance <br> Charge | New <br> Balance |
| :--- | ---: | :---: | :---: | :--- | :--- | :--- |
| 1. | $\$ 550.00$ | $\$ 250.00$ | $\$ 67.50$ | a. | b. | c. |
| 2. | 285.00 | 130.00 | 97.69 | a. | b. | c. |
| 3. | $1,241.73$ | 500.00 | 355.89 | a. | b. | c. |
| 4. | $2,727.56$ | $1,000.00$ | 568.94 | a. | b. | c. |

5. Iris Johana's credit card statement shows a previous balance of $\$ 82.75$. If the periodic rate is 1.75 percent and she made a payment of $\$ 50.00$, what is her finance charge using the unpaid-balance method?
6. William Battles received his monthly credit card statement. The previous balance is $\$ 381.43$. The finance charge is 1.5 percent of the unpaid balance. If he made a payment of $\$ 200.00$, what is his finance charge?
7. Standardized Test Practice Andrew Weinmeyer's credit card statement shows a previous balance of $\$ 628.94$. The periodic rate is 1.375 percent of the unpaid balance. If he had purchases totaling $\$ 351.18$ and made a payment in the amount of $\$ 500.00$, what is his new balance?
A. \$1.77
B. $\$ 8.65$
C. $\$ 488.77$
D. $\$ 481.89$
$\qquad$ Date $\qquad$
$\qquad$

## 7-3

## Calculating Finance Charge Based on Average Daily Balance

Another method credit card companies use to determine your finance charge is the average-daily-balance method where no new purchases are included. The average daily balance is the account balance's average at the end of each day of the billing period. New purchases posted during the billing period are not included when computing the balance at the end of the day. In this method, the finance charge is calculated by multiplying the periodic rate by the average daily balance.

## Example

Find the average daily balance, finance charge, and new balance.

| REFERENCE | POSTING <br> DATE | TRANSACTION <br> DATE | DESCRIPTION |  <br> ADVANCES | PAYMENTS <br> \& CREDITS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 154271 | $6 / 08$ | $6 / 05$ | Joe's Diner <br> 187654 <br> 216745 | $6 / 21$ | $7 / 01$ |

1. Find the sum of daily balances.

| Dates | Payment | End-of-Day <br> Balance | $\times$ | Number <br> of Days | Sum of <br> Balances |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $6 / 03-6 / 20$ |  | $\$ 124.37$ | $\times$ | 18 | $\$ 2,238.66$ |
| $6 / 21$ | $\$ 75.00$ | 49.37 | $\times$ | 1 | 49.37 |
| $6 / 22-7 / 02$ |  | 49.37 | $\times$ | 11 | 543.07 |
| TOTAL |  |  |  |  |  |

2. Find the average daily balance.

Sum of Daily Balances $\div$ Number of Days $=$ Average Daily Balance
$\$ 2,831.10 \div 30=\$ 94.37$ average daily balance
3. Find the finance charge.

Average Daily Balance $\times$ Periodic Rate $=$ Finance Charge
$\$ 94.37 \times .015=\$ 1.42$ finance charge
4. Find the new balance.

Previous Balance + Finance Charge + New Purchases $-($ Payments + Credits $)=$ New Balance $\$ 124.37+\$ 1.42+\$ 130.56-\$ 75.00=\$ 181.35$ new balance
$\qquad$
$\qquad$
$\qquad$

## 7-3

## Calculating Finance Charge Based on Average Daily Balance

## Practice

Fill in the correct amounts using the average-daily-balance, no new purchases included method. The periodic rate is 1.5 percent.

|  | Dates | Payment | End-of-Day <br> Balance | $\times$ | Number <br> of Days | Sum of <br> Balances |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1. | $7 / 05-7 / 20$ |  | $\$ 441.82$ | $\times$ | 16 |  |
| 2. | $7 / 21$ | $\$ 250.00$ | 191.82 | $\times$ | 1 |  |
| 3. | $7 / 21-8 / 02$ |  | 191.82 | $\times$ | 13 |  |
| 4. | TOTAL DAYS |  |  |  |  |  |
| 5. | TOTAL AMOUNT |  |  |  |  |  |
|  |  |  |  |  |  |  |

6. What is the average daily balance?
7. What is the finance charge for the period?
8. Standardized Test Practice Assuming the finance charge is calculated by the average-daily-balance, no new purchases method, what is the new balance?

| BILLING <br> PERIOD | PREVIOUS <br> BALANCE | PERIODIC <br> RATE | AVERAGE DAILY <br> BALANCE | FINANCE <br> CHARGE |
| :---: | :---: | :---: | :---: | :---: |
| $3 / 03-4 / 01$ | $\$ 218.86$ | $2 \%$ | $\$ 154.57$ |  |
| PAYMENTS $\&$ <br> CREDITS |  <br> ADVANCES | NEW BALANCE | MINIMUM <br> PAYMENT | PAYMENT DUE |
| $\$ 100.00$ | $\$ 61.89$ |  | $\$ 15.00$ | $4 / 22$ |

A. $\$ 3.09$
B. $\$ 118.86$
C. $\$ 183.84$
D. $\$ 180.75$
$\qquad$ Date $\qquad$
$\qquad$

## 7-4

## Calculating Finance Charge Based on Average Daily Balance

Another method credit card companies use to determine your finance charge is the average-daily-balance method where new purchases are included when computing the balance at the end of the day. Again, the finance charge is calculated by multiplying the periodic rate by the average daily balance.

## Example

Find the average daily balance, finance charge, and new balance.

| REFERENCE | POSTING <br> DATE | TRANSACTION <br> DATE | DESCRIPTION |  <br> ADVANCES | PAYMENTS <br> \& CREDITS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 154271 | $6 / 08$ | $6 / 05$ | Joe's Diner <br> 187654 <br> 216745 | $6 / 21$ | $6 / 01$ |

1. Find the sum of daily balances.

| Dates | Payment | Purchases | End-of-Day <br> Balance | $\times$ | Number <br> of Days | Sum of <br> Balances |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $6 / 03-6 / 07$ |  |  | $\$ 124.37$ | $\times$ | 5 | $\$ 621.85$ |
| $6 / 08-6 / 20$ |  | $\$ 51.64$ | 176.01 | $\times$ | 13 | $2,288.13$ |
| $6 / 21-6 / 30$ | $\$ 75.00$ |  | 101.01 | $\times$ | 10 | $1,010.10$ |
| $7 / 01-7 / 02$ |  | $\$ 78.92$ | 179.93 | $\times$ | 2 | 359.86 |
| TOTAL |  |  |  |  |  | 30 |
| $4,279.94$ |  |  |  |  |  |  |

2. Find the average daily balance.

Sum of Daily Balances $\div$ Number of Days $=$ Average Daily Balance
$\$ 4,279.94 \div 30=\$ 142.66$ average daily balance
3. Find the finance charge.

Average Daily Balance $\times$ Periodic Rate $=$ Finance Charge
$\$ 142.66 \times .015=\$ 2.14$ finance charge
4. Find the new balance.

Previous Balance + Finance Charge + New Purchases - (Payments + Credits) $=$ New Balance $\$ 124.37+\$ 2.14+\$ 130.56-\$ 75.00=\$ 182.07$ new balance
$\qquad$ Date $\qquad$ Period $\qquad$

## 7-4

## Calculating Finance Charge Based on Average Daily Balance

## Practice

Fill in the correct amounts using the average-daily-balance, new purchases included method. The periodic rate is 1.5 percent.

| Dates | Payment | Purchases | End-of-Day <br> Balance | $\times$ | Number <br> of Days | Sum of <br> Balances |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | $8 / 05-8 / 12$ |  |  | $\$ 466.24$ | $\times$ | 8 |  |
| 2. | $8 / 13-8 / 21$ |  | $\$ 126.73$ | 592.97 | $\times$ | 9 |  |
| 3. | $8 / 22-9 / 03$ | $\$ 325.00$ |  | 267.97 | $\times$ | 13 |  |
| 4. | TOTAL DAYS |  |  |  |  |  |  |
| 5. | TOTAL AMOUNT |  |  |  |  |  |  |

6. What are the average daily balance, the finance charge, and the new balance?
7. Standardized Test Practice Assuming the finance charge is calculated by the average-daily-balance, new purchases included method, what is the new balance?

| REFERENCE | POSTING <br> DATE | TRANSACTION <br> DATE | DESCRIPTION |  <br> ADVANCES | PAYMENTS <br> \& CREDITS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-27643$ | $11 / 18$ | $11 / 17$ | Dept. Store <br> PAYMENT | $\$ 115.46$ |  |
| $2-91524$ | $11 / 21$ | PREVIOUS | PERIODIC <br> RALANCE | AVERAGE DAILY <br> BALANCE | FINANCE <br> CHARGE |
| BILLING PERIOD | RATE |  |  |  |  |
| $11 / 01-11 / 31$ | $\$ 142.88$ | $2 \%$ |  | MINIMUM | PAYMENT |
| PAYMENTS \& |  <br> CREDITS | NEW <br> ADVANCES | BALANCE | PAYMENT | DUE |
| $\$ 75.00$ | $\$ 115.46$ |  | $\$ 25.00$ | $12 / 22$ |  |

A. $\$ 168.41$
B. $\$ 3.37$
C. $\$ 186.71$
D. $\$ 185.67$
$\qquad$ Date $\qquad$
$\qquad$

## Comparing Finance Charge Methods

Your credit card statement for the month of June is shown below. In this chapter, you learned a variety of ways in which credit card companies compute your finance charge. Let's compare them to see which are the most advantageous and which are the most costly to you, the customer.

| REFERENCE | $\begin{array}{c}\text { POSTING } \\ \text { DATE }\end{array}$ | $\begin{array}{c}\text { TRANSACTION } \\ \text { DATE }\end{array}$ | DESCRIPTION | $\begin{array}{c}\text { PURCHASES \& } \\ \text { ADVANCES }\end{array}$ | $\begin{array}{c}\text { PAYMENTS } \\ \text { \& CREDITS }\end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-15724$ | $6 / 08$ | $6 / 07$ | $\begin{array}{l}\text { Home Builders } \\ \text { Casey's Electronics } \\ 1-32766 \\ 1-49287 \\ 1-76591\end{array}$ | $6 / 14$ | $6 / 12$ |$)$

1. What is your finance charge for June if your credit card company uses the unpaid-balance method?
2. How can you make this method of computing your finance charge most advantageous to you?
3. What is your finance charge for June if your credit card company uses the average-daily-balance method where no new purchases are included?
4. What is your finance charge for June if your credit card company uses the average-daily-balance method where new purchases are included?
5. Which is more advantageous to you, the average-daily-balance method where new purchases are included or the average-daily-balance method where no new purchases are included?
6. Using the finance charge you computed in Problem 4, what would your new balance be?
