

Living in the Real World

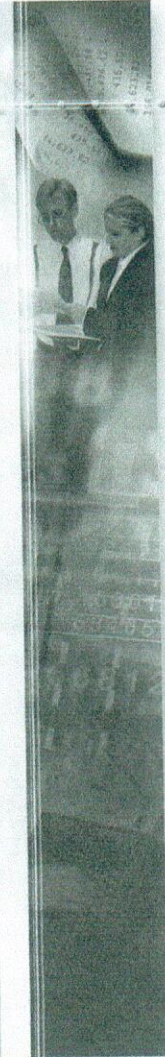
A Financial Gem?

Analyze the Story Perhaps Yuma thinks using a credit card is the way to go when he is tight on cash. Charge it and the worries go away, right? Wrong. It only adds up and can lead to serious financial problems for years (or even decades).

- ① **Reasoning.** If Yuma maintains a high daily balance on his credit card, would it be better for him to find a company that calculates the finance charge based on the unpaid balance?
- ② **Choosing a Method.** Yuma's credit card company uses a finance charge of 1.2 percent for an unpaid balance. Complete the credit card statement on your own piece of paper. (Note: Minimum payment is 12 percent of the previous balance.)

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
3727485	4/11		PAYMENT		\$900.00
4565298	4/15	4/01	Metal	\$250.95	
5473445	4/23	4/21	Stones	198.42	
3566455	4/25	4/23	Clips	55.74	
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
4/1-5/1	\$320.00	1.2%			
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$900.00				5/25	

- ③ **Decision Making.** The best thing to do is pay off your credit card statement at the end of each month. Yuma just sold several of his best pieces of jewelry to the Native American arts museum. What should Yuma do with the money when he receives it?



After YOU READ

REVIEW OF KEY WORDS

account statement (p. 258)
charge account (p. 258)

finance charge (p. 258)
credit card (p. 258)

unpaid-balance method (p. 261)
average-daily-balance method (p. 264)

Match one of the key words above with a definition below.

1. a way of computing finance charges where the average of the charge account balance is averaged at the end of each day in the billing period.
2. a document you receive with a monthly listing of all transactions processed by the closing date of that month.
3. allows the holder to buy things on demand by presenting it.
4. a line of credit, often at a particular business.
5. the interest charged on the amount you owe.

Skills and Concepts

SECTION OBJECTIVE 7-1 AND EXAMPLES

Calculate the new balance in a charge account.

Your monthly statement has a previous balance of \$504.33, with a payment of \$50.00, new purchases of \$12.35 and \$39.54, and a finance charge of \$5.67. What is the new balance?

STEP: Find the new balance.

$$\begin{array}{r} \text{Previous Balance} + \text{Finance Charge} + \text{New Purchases} - (\text{Payments} + \text{Credits}) \\ \$504.33 \quad + \quad \$5.67 \quad + \$12.35 + \$39.54 - \quad \$50.00 \quad = \$511.89 \end{array}$$

REVIEW EXERCISES

What is the new balance for the credit card statements shown?

	Billing Date	Previous Balance	Finance Charge	New Purchases	Payments & Credits	New Balance
6.	9/27/--	\$ 306.55	\$ 6.75	\$ 209.54	\$175.00	
7.	6/29/--	985.66	9.06	1,239.44	300.00	
8.	5/25/--	121.09	2.35	219.30	53.00	
9.	6/15/--	1,239.92	18.56	500.00	895.00	

SECTION OBJECTIVE 7-2 AND EXAMPLES

Find the finance charge by using the unpaid-balance method.

Aldo Vazquez has a charge account at Robert's Bike Shop, which uses the unpaid-balance method of computing finance charges. The periodic rate is 1.25 percent. If Vazquez's previous balance was \$569.32 and he had payments and credits of \$150.00, find his unpaid balance and finance charges. He had new purchases of \$97.50. Find his new balance.

STEP 1: Find the unpaid balance.

$$\begin{array}{r} \text{Previous Balance} - (\text{Payments} + \text{Credits}) \\ \$569.32 \quad - \quad \$150.00 \quad = \$419.32 \end{array}$$

STEP 2: Find the finance charge.

$$\begin{array}{r} \text{Unpaid Balance} \times \text{Periodic Rate} \\ \$419.32 \quad \times \quad 1.25\% \quad = \$5.2415 \text{ or } \$5.24 \end{array}$$

STEP 3: Find the new balance.

$$\begin{array}{r} \text{Unpaid Balance} + \text{Finance Charge} + \text{New Purchases} \\ \$419.32 \quad + \quad \$5.24 \quad + \quad \$97.50 \quad = \$522.06 \text{ new balance} \end{array}$$

REVIEW EXERCISES

10. Denise Shelby's account statement. Unpaid balance of \$210.94. Periodic rate of 1.85 percent. What is the finance charge? New purchases of \$341.22. What is the new balance?
11. Fredericka Smith's account statement. Unpaid balance of \$75.06. Periodic rate of 2 percent. What is the finance charge? New purchases of \$432.11. What is the new balance?

Use a periodic rate of 1.25 percent and the unpaid-balance method of computing the finance charge for Problems 12 and 13.

	Previous Balance	Payments & Credits	Unpaid Balance	Finance Charge	New Purchases	New Balance
12.	\$400.00	\$200.00	a.	b.	\$300.00	c.
13.	654.99	300.00	a.	b.	76.45	c.

SECTION OBJECTIVE 7-3 AND EXAMPLES

Calculate the finance charge based on the average-daily-balance method where no new purchases are included.

A portion of Jamal Johnson's credit card statement is shown. A finance charge was added to his account balance because he did not pay his last bill in full. The finance charge was computed using the average-daily-balance method where new purchases are not included. Find the average daily balance, finance charge, and the new balance.

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
7044598	6/04	6/02	Pictures	\$103.95	
7044791	6/13		PAYMENT		\$50.00
7049810	6/22	6/18	Shirt	56.49	
7050002	6/27	6/22	Paint	19.95	
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
6/1-6/30	\$125.88	1.5%	a.	b.	
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$50.00	\$180.39	c.	\$25.00	7/31	

STEP 1: Find the sum of the daily balances.

Dates	Payment	End-of-Day Balance	Number of Days	Sum of Balances
6/1-6/12		\$125.88	12	\$1,510.56
6/13	\$50.00	75.88	1	75.88
6/14-6/30		75.88	17	1,289.96
TOTAL			30	\$2,876.40

STEP 2: Find the average daily balance.

Sum of Daily Balances ÷ Number of Days

$$\frac{\$2,876.40}{30} = \$95.88 \text{ average daily balance}$$

STEP 3: Find the finance charge.

Average Daily Balance × Periodic Rate

$$\$95.88 \times 1.5\% = \$1.438 \text{ or } \$1.44 \text{ finance charge}$$

STEP 4: Find the new balance.

Previous Balance - (Payments + Credits)

$$\$125.88 - \$50 = 75.88$$

Unpaid Balance + Finance Charge + New Purchases

$$75.88 + \$1.44 + \$180.39 = \$257.71 \text{ new balance}$$

REVIEW EXERCISES

14. George Silas has a bank credit card. A portion of his account statement is shown below. Find the average daily balance excluding new purchases, the finance charge, and the new balance.

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
2100091	3/07	3/06	Mower	\$188.95	
2100187	3/17		PAYMENT		\$75.00
2100766	3/20	3/18	Bicycle	58.88	
2100789	3/22	3/19	Work shoes	14.88	
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
3/1-3/31	\$651.20	1.75%	a.	b.	
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$75.00	\$262.71	c.	\$25.00	4/30	

REVIEW EXERCISES (continued)

The finance charge is computed using the average-daily-balance method where no new purchases are included. Find the finance charge and the new balance for the following statements.

15.

Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge
7/01-7/31	\$156.90	2%	\$143.00	a.
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due
\$85.00	\$35.00	b.	\$10.00	8/15

16.

Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge
9/01-9/30	\$705.09	1.5%	\$655.35	a.
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due
\$100.00	\$0.00	b.	\$25.00	10/10

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

17.

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
6345666	10/25	10/20	Dept. store	\$32.45	
6345788	11/4	11/1	PAYMENT		\$40.00
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
10/15-11/14	\$45.66	1.5%	a.	b.	
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$40.00	\$32.45	c.	\$15.00	12/10	

SECTION OBJECTIVE 7-4 AND EXAMPLES

Compute the finance charge based on the average-daily-balance method where new purchases are included.

Martin Choi has a department store charge account where the finance charge is computed using the average-daily-balance method that includes new purchases. What is his average daily balance and his finance charge? What is his new balance?

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
3809018	11/10	11/8	Fine art	\$125.44	
3809117	11/20	11/15	PAYMENT		\$200.00
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
11/04-12/03	\$623.11	1.25%	a.	b.	
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$200.00	\$125.44	c.	\$20.00	12/20	

STEP 1: Find the sum of the daily balances.

Dates	Payment	Purchase	End-of-Day Balance	Number of Days	Sum of Balances
11/04-11/09			\$623.11	6	\$ 3,738.66
11/10		\$125.44	748.55	1	748.55
11/11-11/19			748.55	9	6,736.95
11/20	\$200.00		548.55	1	548.55
11/21-12/3			548.55	13	7,131.15
TOTAL				30	\$18,903.86

STEP 2: Find the average daily balance.

$$\text{Average Daily Balance} = \frac{\text{Sum of Daily Balances}}{\text{Number of Days}}$$

$$\$18,903.86 \div 30 = \$630.13 \text{ average daily balance}$$

STEP 3: Find the finance charge.

$$\$630.13 \times 1.25\% = \$7.88 \text{ finance charge}$$

STEP 4: Find the unpaid balance.

$$\begin{array}{r} \text{Previous Balance} - (\text{Payments} + \text{Credits}) \\ \$623.11 \quad - \quad \$200.00 \quad = \$423.11 \end{array}$$

STEP 5: Find the new balance.

$$\begin{array}{r} \text{Unpaid Balance} + \text{Finance Charge} + \text{New Purchases} \\ \$423.11 \quad + \quad \$7.88 \quad + \quad \$125.44 \quad = \$556.43 \text{ new balance} \end{array}$$

REVIEW EXERCISES

18. Drew Williams received this statement from his bank. Find the average daily balance (new purchases included), the finance charge, and the new balance.

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
1238090	2/5	2/3	Home repairs	\$ 75.66	
2789433	2/10	2/8	PAYMENT		\$100.00
3459811	2/17	2/15	Discount store	198.33	
4334681	2/27	2/24	PAYMENT		50.00
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
2/01-2/28	\$36.54	2.1%	a.	b.	
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$150.00	\$273.99	c.	\$10.00	3/15	

19. Freddie Vargo received this statement from the department store. Find the average daily balance (new purchases included), the finance charge, and the new balance.

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
2034599	3/2		PAYMENT		\$35.00
2034766	3/11	3/8	Housewares	\$123.96	
2040009	3/20	3/12	Shoes	56.49	
2040065	3/25		PAYMENT		50.00
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
3/1-3/31	\$200.34	2%	a.	b.	
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$85.00	\$180.45	c.	\$25.00	4/30	

20. Monica Sweeny received this statement from Market Street Bank. Find the average daily balance (new purchases included), the finance charge, and the new balance.

Reference	Posting Date	Transaction Date	Description	Purchases & Advances	Payments & Credits
1809008	9/20	9/15	Electronics	\$25.44	
1809039	9/25		PAYMENT		\$100.00
1809111	10/02	9/29	Sports Inc.	66.74	
1809388	10/10		PAYMENT		50.00
Billing Period	Previous Balance	Periodic Rate	Average Daily Balance	Finance Charge	
9/15-10/14	\$321.99	1.75%	a.	b.	
Payments & Credits	Purchases & Advances	New Balance	Minimum Payment	Payment Due	
\$150.00	\$92.18	c.	\$15.00	11/10	