

# 3-6 Credit Card Statements

Advanced Financial Algebra

# Introduction

- A credit card statement is sent at the end of each billing cycle, usually monthly.
- Read it carefully and verify all charges and fees.
- If you wait too long, you may not be able to dispute mistakes.

# What information does a credit card statement give you?

- Account #
- Credit line = total available money limit
- Available credit = credit line - charges already made = leftover
- Billing date = date the bill was printed/issued
- Payment due date = day payment must be received by credit card company
- Transactions = everything that happened on account that month
  - Debits increase your debt = purchases, cash advances, fees
  - Credits decrease your debt = payments, returns, refunds

# More information that a credit card statement gives you

- Previous balance = balance from the previous month that you did not pay off
- Late charges = fee for paying late or paying less than the minimum payment
- New Balance = amount you owe at the end of the current month after all of the transactions have been added and subtracted
- Minimum payment = the least you can pay the credit card company that month and not be charged any fees (this is usually a percent of your balance like 1 or 2%)

# Example 1 - summary portion of statement

SUMMARY	Previous Balance	Payments / Credits	New Purchases	Late Charge	Finance Charge	New Balance	Minimum Payment
	\$150.50	-\$75.00	\$284.45	\$0.00	\$3.53	\$363.48	\$20.00

ACCOUNT INFORMATION			
Account Number	2653 8987 6098	Billing Date	23 Jan
		Payment Due	2 Feb
TRANSACTIONS			DEBITS / CREDITS (-)
2 Jan	Candida's Gift Shop		\$75.00
3 Jan	Skizza's Pizzas		\$31.85
5 Jan	Beekman Department Store		\$139.10
10 Jan	Festival Book Store		\$38.50
21 Jan	Payment		-\$75.00

- This is the summary portion of Jane's credit card statement for January.
- a) How was the "new purchases" amount determined?
- b) How was the new balance amount determined?

- SOLUTION:
- a) Add Jane's purchase amounts from above  
 $= 75 + 31.85 + 139.10 + 38.5 = \$284.45$
- b)

Previous Balance	-	Payments / Credits	+	New Purchases	+	Finance Charge	+	Late Charge	=	New Balance
150.50	-	75	+	284.45	+	3.53	+	0	=	\$363.48

## Example 2 - available credit

- Pascual has a \$15,000 credit limit, how much available credit does he have according to his credit card statement summary?

SUMMARY	Previous Balance	Payments / Credits	New Purchases	Late Charge	Finance Charge
	\$4,598.12	-\$4,000.00	\$1,368.55	\$20.00	\$5.78

- SOLUTION:
- Pascual needs to determine his new balance and then subtract that from his credit line in order to find his available credit.

$$4,598.12 - 4,000.00 + 1,368.55 + 20.00 + 5.78 = 1,992.45$$

- He has a new balance of \$1,992.45. Subtracting this from his credit line of \$15,000 leaves him with an available credit of \$13,007.55.

# Example 3 - finance charge

- Myrna looked at her credit card statement. She agrees with everything except the new balance. What do you think was the bank's mistake?

SUMMARY	Previous Balance	Payments / Credits	New Purchases	Late Charge	Finance Charge	New Balance
	\$1,748.00	-\$100.00	\$800.00	\$9.15	\$19.00	\$2,576.15

\$1,748.00	previous balance
800.00	purchases
9.15	finance charge
<u>+ 19.00</u>	late charge
\$2,576.15	total to be paid

- SOLUTION:
- Add the amounts that show Myrna's debits.
- Subtract the \$100 payment/credit, and Myrna's new balance will be \$2,476.15. It appears that Myrna was not credited for her payment. Under the Fair Credit Billing Act, Myrna must notify her creditor in writing within 60 days from the statement date on her bill.

Assignment #1: pg 205 #2, 4, 5, 9, pg 177 #3, 4, 6 a&b only, 10, 11 a-d

Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23

• #2

Shania bought a \$1,455 drum set on the installment plan. The installment agreement included a 15% down payment and 18 monthly payments of \$80.78 each.

a. How much is the down payment?

b. What is the total amount of the monthly payments?

c. How much will Shania pay for the drum set on the installment plan?

d. What is the finance charge?

• #4

Sal took out a 20-day payday loan from the Just Loans store. He borrowed \$350 and is being charged \$75 interest. What is the APR for this loan?



Assignment #1: pg 205 #2, 4, 5, 9, pg 177 #3, 4, 6 a&b only, 10, 11 a-d continued  
Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23

• #5

Carly took a \$7,000, 3-year loan with an APR of 3.15%.

a. What is the monthly payment?

b. What is the total amount of the monthly payments?

c. What is the finance charge?

• #9

Maribel was approved for a 7-year private student loan at 6.8% to cover her college costs of \$10,900.

a. Determine her monthly payment.

b. What is the total amount she will pay back?

c. What is the total interest amount?

Assignment #1: pg 205 #2, 4, 5, 9, pg 177 #3, 4, 6 a&b only, 10, 11 a-d continued

Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23

- Pg 177 #3

Jamie wants to borrow \$15,000 from South Western Bank. They offered her a 4-year loan with an APR of 5.5%. How much will she pay in interest over the life of the loan?

- #4

Charlie and Kathy want to borrow \$20,000 to make some home improvements. Their bank will lend them the money for 10 years at an interest rate of 5.75 %. How much will they pay in interest?

Assignment #1: pg 205 #2, 4, 5, 9, pg 177 #3, 4, 6 a&b only, 10, 11 a-d continued

Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23

- #6 A bank offers a \$25,000 loan at an interest rate of 7.7% that can be paid back over 2-10 years.
  - a) Write the monthly payment formula for this loan situation. Let  $t$  represent the number of years from 2 to 10 inclusive.
  - b) Write the total interest formula for this loan situation. Let  $t$  represent the number of years from 2 to 10 inclusive.
- #10

Dave wants to borrow \$22,000 from First Finance Bank. The bank will give him a 15-year loan at an interest rate of 4.85%. How much will he pay the bank in interest over the life of the loan? Round to the nearest hundred dollars.

Assignment #1: pg 205 #2, 4, 5, 9, pg 177 #3, 4, 6 a&b only, 10, 11 a-d continued

Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23

• #11

a. What is the loan amount?

b. What is the length of the loan (in years)?

c. What is the monthly payment?

d. What is the total interest paid?

Use the given yearly payment schedule.

Year	Principal Paid	Interest Paid	Loan Balance
			<b>\$10,000.00</b>
1	<b>\$680.52</b>	<b>\$775.41</b>	<b>\$9,319.48</b>
2	<b>\$737.01</b>	<b>\$718.92</b>	<b>\$8,582.47</b>
3	<b>\$798.18</b>	<b>\$657.75</b>	<b>\$7,784.29</b>
4	<b>\$864.43</b>	<b>\$591.50</b>	<b>\$6,919.86</b>
5	<b>\$936.17</b>	<b>\$519.76</b>	<b>\$5,983.69</b>
6	<b>\$1,013.88</b>	<b>\$442.05</b>	<b>\$4,969.81</b>
7	<b>\$1,098.03</b>	<b>\$357.90</b>	<b>\$3,871.78</b>
8	<b>\$1,189.16</b>	<b>\$266.77</b>	<b>\$2,682.62</b>
9	<b>\$1,287.86</b>	<b>\$168.07</b>	<b>\$1,394.76</b>
10	<b>\$1,394.76</b>	<b>\$61.18</b>	<b>\$0.00</b>

# Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23

- Pg 191 #2 - How many purchases were made during the billing cycle?
- #3 - What is the sum of all purchases made during the billing cycle?
- #4 - When is the payment for this statement due?
- #5 - What is the minimum amount that can be paid?
- #6 - How many days are in the billing cycle?
- #7 - What is the previous balance?

Use the FlashCard statement to answer Exercises 1-6.

ACCOUNT INFORMATION							
Account Number		4-10700000		Billing Date		30 May	
				Payment Due		8 Jun	
TRANSACTIONS							DEBITS / CREDITS (-)
9 MAY	3291684271	Fanelli Furs				\$975.00	
12 MAY	594683219	Brooklyn Pets				\$32.50	
15 MAY	7677095385	Maple Garage				\$178.21	
18 MAY	8765713281	PAYMENT				-\$150.00	
21 MAY	321447162	Caruso's Restaurant				\$41.53	
SUMMARY	Previous Balance	Payments / Credits	New Purchases	Late Charge	Finance Charge	New Balance	Minimum Payment
	\$420.50	-\$150.00	\$1,227.24	\$0.00	\$19.80	\$1,517.54	\$30.00
Total Credit Line				\$ 3,000.00		Average Daily Balance	# Days in Billing Cycle
Total Available Credit				\$ 1,661.51			APR
						\$1,199.97	30
							19.8%
							Monthly Periodic Rate
							1.65%

# Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23 continued

- #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?

- #11

Sheldon's monthly periodic rate is 1.95%. What is the APR?

- #12

Zea 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 Zea can continue this pattern until she reaches her credit limit.

b. Consider that part of the \$125 Zea pays each month will be for finance charges. How will the number of months from part a be affected by these charges?

# Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23 continued

• #14

Fill in the missing amounts for a–d.

ACCOUNT INFORMATION							
Type	Revolving	Account Number	234 98765 90	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 / Credits	New Purchases	Late Charge	Finance Charge	New Balance	Minimum Payment
	\$215.88	<b>a.</b>	<b>b.</b>	\$0.00	\$6.70	<b>c.</b>	\$25.00
Total Credit Line			\$ 5,000.00	Average Daily Balance	# Days in Billing Cycle	APR	Monthly Periodic Rate
Total Available Credit			<b>d.</b>	\$446.41	30	18%	1.5%

# Assignment #2: pg 191 # 2-7 all, 9, 11, 12, 14, pg 207 #23 continued

## • Pg 207 #23

a. What is the total of all of the purchases made this billing cycle?

b. What is the amount of total payments?

c. What is sum of the daily balances?

d. What is the average daily balance?

e. What is the monthly periodic rate?

f. What is the finance charge?

g. What is the new balance?

h. What is the available credit?

Use the credit card statement and a blank credit card calendar.

ACCOUNT INFORMATION							
Account Number		3-22767195		Billing Date		5 May	
				Payment Due		18 May	
TRANSACTIONS							DEBITS / CREDITS (-)
7 APR	124576893	Macy's				\$676.00	
15 APR	762938471	Bedford Auto Body Shop				\$721.80	
19 APR	309175832	Barnes and Noble Books				\$93.15	
27 APR	100445638	Payment				-\$1,340.00	
30 APR	876655411	FedEx				\$115.75	
3 MAY	998430828	TicketMaster				\$450.95	
SUMMARY	Previous Balance	Payments / Credits	New Purchases	Late Charge	Finance Charge	New Balance	Minimum Payment
	\$978.00	-\$1,340.00	\$2,057.65	\$0.00			\$115.00
Total Credit Line				\$3,000.00		Average Daily Balance	# Days in Billing Cycle
Total Available Credit							APR
							Monthly Periodic Rate
						30	19.8%
							1.65%