

# Math for Financial Literacy ©2013

## Chapter 7: Credit Cards—Checkpoint Solutions

### Checkpoint 7.1

1. Armando checked his department store credit account balance online and learned that it was \$375.16. He charged a pair of shoes to his account for \$83.47. If his credit limit is \$500, what is the remaining available credit on this account?

Answer: \$41.37

2. Ana received her credit card bill in the mail, and it showed an account balance of \$679.35. She made a purchase of \$114.64 that is not shown on the bill. If her credit limit is \$1,500, what is Ana's remaining available credit on this account?

Answer: \$706.01

3. Garrett has a gasoline company credit card. He has a balance of \$110.43, and the bank raised his credit limit to \$750. What is Garrett's remaining available credit on this account?

Answer: \$639.57

4. Yolanda has a credit card with a balance of \$743.15 and a credit limit of \$1,500. She also has a second credit card with no balance and a credit limit of \$2,000. What is Yolanda's combined available credit?

Answer: \$2,756.85

5. Rishi checked his credit card account online and noticed that he has a current balance of \$1,620.77 and remaining available credit of \$2,879.23. What is the credit limit on Rishi's account?

Answer: \$4,500

### Checkpoint 7.2

1. Sabrina has a credit card with an APR of 22.7%. What is her monthly periodic rate? Round to the nearest ten-thousandth (0.0001) if necessary.

Answer: 1.8917%

2. Byron has a credit card with an APR of 17.6%. The billing cycle is monthly, and an unpaid balance method is used to calculate the finance charge. His previous balance was \$1,658.73. During the month, he made a \$175 payment. What is Byron's new balance?

Answer: \$1,505.49

3. Lee has a credit card with a 22.3% APR and a 30-day billing period that uses the average daily balance method to calculate the finance charge. His daily balances for one billing period are shown in the following chart. Lee had a previous balance of \$445.93, made a payment of \$350, and has new purchases that total \$1,643.57. Determine Lee's average daily balance.

Answer: \$1,219.62

4. Padma has a credit card with a 21.9% APR and a 30-day billing period that uses the average daily balance method to calculate the finance charge. Her daily balances for one billing period are shown in the following chart. Padma had a previous balance of \$263.71. She made a payment of \$225 and new purchases that total \$1,270.88. Determine Padma's average daily balance.

Answer: \$938.94

5. Alexandria received a set of convenience checks with her last credit card statement. She decided to use one of the checks to transfer a balance from another credit card to this credit card account. The check has a fee of 1.75%, and Alexandria wrote the check for \$769.42. Calculate the fee that Alexandria will pay for using the convenience check.

Answer: \$13.46

### Checkpoint 7.3

1. Jason has a credit card with a nominal APR of 17.65%. The interest on unpaid balances compounds daily. What is the EAR?

Answer: 19.3%

2. Lashawna works as a travel agent and earns \$33,950 per year.

mortgage: \$560.92

car loan: \$239.76

credit cards: \$163.74

Answer: 34.1%

3. Rolando works as an agricultural inspector and earns \$1,628.46 biweekly.

mortgage: \$858.16

car loan: \$217.94

student loans: \$207.73

credit cards: \$185.76

Answer: 41.7%

4. Melanie works as an aircraft repair technician and earns \$2,220 semimonthly.

mortgage: \$749.16

car loan: \$178.63

student loans: \$201.74

credit cards: \$148.77

Answer: 28.8%

5. Sheng has two credit cards. He used his credit card statements to make the summary table that follows. Sheng is also eligible for a debt consolidation loan with an APR of 10.7% that reduces his monthly payments to \$179.37. This loan will take six years to pay off, and Sheng will pay a total of \$3,414.39 in interest charges. How much more in interest charges will the debt consolidation loan cost Sheng?

Answer: \$765.39