## **Section 9.3 Manage Credit Cards**

1. Calculate the daily interest rate for each credit card annual interest rate. Express each answer as a decimal rounded to 6 decimal places.

<b>a)</b> 22.5%	<b>b)</b> 14.9%
<b>c)</b> 28.3%	<b>d)</b> 17.7%
<b>e)</b> 19.3%	<b>f)</b> 26.6%

- 2. Interest is charged daily on each overdue credit card balance. Calculate the amount of interest paid in each situation. Use a TVM Solver to check.
  - a) Sam's credit card has an overdue balance of \$1862. Interest is charged for 20 days at an annual rate of 21.5%.
  - b) Carine's credit card has an overdue balance of \$4000. Interest is charged for 45 days at an annual rate of 18.7%.
  - c) Jayeed has an overdue balance of \$6125. Interest is charged for 11 days at an annual rate of 22.9%.
  - **d)** Sheryl has an overdue balance of \$895. Interest is charged for 5 days at an annual rate of 14.4%.
- Malik's credit card payment was due on January 14th. He made his payment on February 5th at a bank machine. Four days are required to process the transaction. Malik's credit card offers a 7-day grace period before interest is charged. For how many days will Malik be charged interest?
- **4.** a) Suggest a reason why someone would choose a credit card that has an annual fee.
  - **b)** Suggest a reason why someone would choose a credit card with no annual fee.

- 5. A credit card statement shows a grace period of 15 days. It was issued on March 26th. What is the latest date the payment can be made so no interest is charged?
- 6. On a certain credit card, the minimum monthly payment required is the greater of \$25 or 3.5% of the balance. Determine the minimum payment owed on each balance.
  - a) \$350.85
    b) \$4106.82
    c) \$1163.63
  - **d**) \$712.55
- 7. Refer to question 6. Interest is charged daily on the balance after a monthly payment is made. Suppose the minimum payment is made on each balance, and the annual interest rate is 18.4% compounded daily. Calculate the interest that will be charged on the balance carried forward to the next billing date, 31 days later.
- 8. Derek thought he had a plan to get "free stuff". He applied for two different credit cards and was approved for both. He made a major purchase on each card, for about half of the credit limit on the card. Then, he took cash advances from each card to pay the minimum payment on the other card. He thought that this plan meant he would never need to use his own money to make payments on either card. Explain the flaw in Derek's thinking.



- **9.** Some credit card companies offer a prepaid credit card. A fixed amount of money can be paid onto the card, and every purchase is deducted from the balance until the balance reaches zero. More money can then be added to card. Gerald says this type of credit card is more like a bank account debit card than a regular credit card. Do you agree with Gerald? Explain why or why not.
- **10.** Renata has two bank-issued credit cards and a retail credit card for a home electronics store. The table shows the status of the three cards today.

	Balance (\$)	Annual Interest Rate (%)
Bank A	1656	16.6
Bank B	853	18.1
Retail Card	1854	31.5

- a) On each card, the minimum payment is the greater of 3.5% of the balance or \$40. Calculate the minimum payment for each card.
- **b)** Suppose Renata make the minimum payments for all three cards. How much interest will she owe on the remaining balances at the end of the next billing period, 31 days later?
- c) Renata earned some extra money. She plans to use this money to pay down one of her cards. Which card should Renata pay down? Explain.