

▶ Extending Concepts

Credit Cards The tables show all the activity in two credit card accounts for an entire billing period. In Exercises 19–24, use the tables.

Date	Activity	Amount	Balance
April 1			\$300.00 ← Starting balance
April 5	Gas	\$45.00	\$345.00
April 8	Payment	−\$300.00	\$45.00
April 23	Groceries	\$70.00	\$115.00
April 30			\$115.00 ← Ending balance



Date	Activity	Amount	Balance
July 21			\$800.00 ← Starting balance
July 29	Car insurance	\$110.00	\$910.00
August 3	Gym membership	\$40.00	\$950.00
August 3	Payment	−\$500.00	\$450.00
August 9	Cell phone	\$75.00	\$525.00
August 20			\$525.00 ← Ending balance



- When a billing period ends, the ending balance plus any additional charges becomes the starting balance of the next billing period. The account owners have 25 days from the end of the billing period to make a payment. Are the payments shown made on time?
- Each credit card account has no interest charge as long as the balance of the previous billing period was paid in full. Do the accounts have interest charges for the billing periods shown? Explain.
- The owner of the Gold Card receives a billing statement for the month of May. The statement includes an interest charge. What can you determine about the amount paid on the April statement?
- The *daily periodic rate* (DPR) of a credit card is the daily interest rate, which is the APR divided by the number of days in a year. The APR of each credit card is 19.99%. Find the DPR of each credit card.

DATA 23. The *average daily balance* of a credit card account in a billing period is the sum of the balances at the end of each day in the billing period divided by the number of days in the billing period. Find the average daily balance of each account.

- The interest charge on each credit card account is the product of the average daily balance, the DPR, and the number of days in the billing period. Find the interest charge for the World Card.

