Dividing by Multiples of 10

Find $623 \div 40$.

Step 1: Estimate the quotient using compatible numbers, $600 \div 40 = 15$. Then, divide the tens.

$$\begin{array}{c} 1 \\ 40)\overline{623} \\ \underline{-40} \\ 22 \\ \end{array} \begin{array}{c} \text{Divide } 62 \div 40 \\ \text{Multiply } 1 \times 40 = 40 \\ \text{Subtract } 62 - 40 = 22 \\ \text{Compare } 22 < 40 \\ \end{array}$$

Step 2: Bring down the ones. Then, divide the ones.

$$\begin{array}{r}
15 \\
40)623 \\
\underline{-40} \\
223 \text{ Divide } 223 \div 40 \\
\underline{-200} \text{ Multiply } 5 \times 40 = 200 \\
23 \text{ Subtract } 223 - 200 = 23
\end{array}$$

Step 3: Since 23 < 40, write 23 as the remainder in the quotient.

$$\begin{array}{r}
15 \text{ R23} \\
40)623 \\
\underline{-40} \\
223 \\
\underline{-200} \\
23 \text{ Compare } 23 < 40
\end{array}$$

Complete.

6. Celia plans to pack her books in boxes when her family moves. Each box will hold 20 books. Celia has 97 books. How many boxes will she need to pack all her books?

Practice

5-4

Dividing by Multiples of 10

In 1 through 6, divide.

- **1.** 20)467
- **2.** 40)321
- ____

- **3.** 80)813
- **4.** 40)284
- **5.** 90)648
- **6.** 10)587
- 7. To drive from New York City, NY, to Los Angeles, CA, you must drive about 2,779 miles. If you drive 60 miles per hour, about how many hours would you spend driving?
- 8. Suppose one bottle of paint can cover 20 tiles. You have 348 tiles. How many bottles of paint do you need to buy to cover all 348 tiles? Explain.

- **9.** A group of 483 students is taking a field trip. One bus is needed for every 50 students. How many buses are needed?
- **10.** A decagon is a ten-sided figure. If a regular decagon has a perimeter of 114 centimeters, how long is each side of the figure?
 - **A** 11.4 cm
- **B** 14 cm
- **C** 114 cm
- **D** 124 cm
- **11.** To figure out how many hours it will take to drive from his home to his cousin's house, a student divides 289 by 60 and estimates that it will take about 4.5 hours. Explain whether you think this is a reasonable estimate.