4-5

Dividing by 1-Digit Divisors

Find $362 \div 5$.

Step 1: To decide where to place the first digit in the quotient, compare the first digit of the dividend with the divisor.

3 < 5, so the first digit in the quotient will not go in the hundreds place.

Now, compare the first two digits of the dividend with the divisor.

36 > 5, so the first digit in the quotient will go in the tens place.

Step 2: Divide the tens. Use multiplication facts and compatible numbers.

Think $5 \times ? = 35$.

Write 7 in the tens place of the quotient.

Multiply. $5 \times 7 = 35$

$$\begin{array}{r}
 7 \\
 \hline
 5)36 \\
 \hline
 -35 \\
 \hline
 1
 \end{array}$$

Subtract. 36 - 35 = 1Compare. 1 < 5Bring down the ones. **Step 3:** Divide the ones. Use multiplication facts and compatible numbers.

Think $5 \times ? = 10$.

Write 2 in the ones place of the quotient.

Multiply. $5 \times 2 = 10$

$$\begin{array}{r}
 7 \text{ 2R2} \\
 5)3 6 2 \\
 -3 5 \downarrow \\
 \hline
 1 2 \\
 -1 0 \\
 \hline
 2
\end{array}$$

Subtract. 12 - 10 = 2Compare. 2 < 5There are no more digits to bring down, so 2 is

the remainder.

Step 4: Check by multiplying.

 $5 \times 72 = 360 + 2 = 362$

7. Number Sense How can you tell before you divide 425 by 9 that the first digit of the quotient is in the tens place?

Dividing by 1-Digit Divisors

Find each quotient.

1. 2)586

2. 3)565

3. 5)718

4. 4)599

5. 5)642

6. 6)354

7. 9)210

8. 8)927

The Paez family lives in Louisville, Kentucky, and has decided to take a road trip for their summer vacation.

- **9.** How many miles will the Paez family drive each day if they decide to take 5 days to drive 865 mi to Dallas?
- 10. The Paez family decides they want to drive
 996 mi to Boston in 6 days. How many
 miles will they drive each day?
- **11. Reasonableness** If a staff of 9 people had to clean a hotel with 198 rooms, how many rooms would each person have to clean if they divided the rooms equally?

A 29

© Pearson Education, Inc. 5

B 25

C 23

D 22

12. Explain It Explain how to check the quotient from a division problem.