

Name _____

Exploring Patterns in Division

Using what you have learned, tell how many digits there will be in each quotient.

1. $4\overline{)800}$

2. $3\overline{)9,000}$

3. $8\overline{)40}$

4. $6\overline{)1,800}$

5. $6\overline{)3,000}$

Complete the pattern.

6. $6\overline{)24}$

$6\overline{)240}$

$6\overline{)2,400}$

7. $9\overline{)27}$

$9\overline{)270}$

$9\overline{)2,700}$

8. $5\overline{)40}$

$5\overline{)400}$

$5\overline{)4,000}$

9. $8\overline{)56}$

$8\overline{)560}$

$8\overline{)5,600}$

Find the quotient. Then continue each example by changing the dividend, using multiples of 10, 100, and 1,000 to make a pattern.

10. $4\overline{)28}$

11. $6\overline{)48}$

12. $5\overline{)45}$

13. $7\overline{)35}$

$4\overline{)280}$

$6\overline{)480}$

$5\overline{)450}$

$7\overline{)350}$

$4\overline{)2,800}$

$6\overline{)4,800}$

$5\overline{)4,500}$

$7\overline{)3,500}$

$4\overline{)28,000}$

$6\overline{)48,000}$

$5\overline{)45,000}$

$7\overline{)35,000}$

EVERYDAY MATH CONNECTION

14. The public library has 1,200 books to sell at a sale. An equal number of books are placed into 6 bookcases. How many books are in each bookcase? _____
15. The same number of books are placed on each shelf. If each of the 6 bookcases has 4 shelves, how many books are on each shelf? _____

Exploring Patterns in Division

Answer Key

1. three
2. four
3. one
4. three
5. three
6. 4, 40, 400
7. 3, 30, 300
8. 8, 80, 800
9. 7, 70, 700
10. 7; 70; 700; 7000
11. 8; 80; 800; 8000
12. 9; 90; 900; 9000
13. 5; 50; 500; 5000
14. 200 books
15. 50 books

