

Name \_\_\_\_\_

# Place-Value Relationships

In multi-digit numbers, when the same two digits are next to each other, the value of the digit at the left is ten times greater than the value of the digit at the right. For example:

$$99 = 90 + 9$$

$$9 \text{ ones} \times 10 = 90$$

When the same two digits are separated by one digit, the value of the digit at the left is one hundred times greater than the value of the digit at the right. For example:

$$909 = 900 + 9$$

$$9 \text{ ones} \times 100 = 900$$

When the same two digits are separated by two digits, the value of the digit at the left is one thousand times greater than the value of the digit at the right. For example:

$$9,009 = 9,000 + 9$$

$$9 \text{ ones} \times 1,000 = 9,000$$

Name the values of the given digits in each number. Then tell how many times greater the value of the digit at the left is than the value of the digit at the right.

1. the 3s in 330 300 30

How many times greater? 10

2. the 2s in 202 200 2

How many times greater? 100

3. the 6s in 6,600 6,000 600

How many times greater? 10

4. the 1s in 1,001 1,000 1

How many times greater? 1,000

5. the 8s in 8,485 8,000 80

How many times greater? 100

6. the 4s in 400,400 400,000 400

How many times greater? 1,000

7. the 4s in 346,754 40,000 4

How many times greater? 10,000

8. the 3s in 300,003 300,000 3

How many times greater? 100,000