1.2 Exponents
p. 10
9-12 -17

Sep 15-9:53 AM

This multiplication can also be written as a **power**, using a *base* and an *exponent*. The **exponent** tells how many times to use the **base** as a factor.

$$2^4$$

Base → **2** ← Exponent (power)

$$2 \cdot 2 \cdot 2 \cdot 2 = 16$$
$$4 \cdot 4$$

Sep 12-11:51 AM

Squared – to the 2nd power

□ $\quad 3^2 = 9$

Cubed – to the 3rd power

$\quad 3^3 = 27$

Sep 17-10:33 AM

$$7^1 = 7 \qquad 10^1 = 10$$

$$6^0 = 1 \qquad 21^0 = 1$$

$$1,000^0 = 1$$

Sep 17-12:18 PM

$3^0 = 1$ ·3

$3^1 = 3$ ·3 ÷3

$3^2 = 9$ ·3 ÷3

$3^3 = 27$ ·3 ÷3

$3^4 = 81$ ·3

$3^5 = 243$ ÷3

Sep 17-12:19 PM

Find each value.

A. $4^4 = 4 \cdot 4 \cdot 4 \cdot 4 = 256$

B. $7^3 = 7 \cdot 7 \cdot 7 = 343$

C. $19^1 = 19$

Sep 12-11:55 AM

Write each number using an exponent and the given base.

A. 625, base 5

$$5^4 = 625$$

B. 64, base 2

$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$ $2^{\boxed{6}} = 64$

Sep 12-11:56 AM

On Monday, Erik tells 3 people a secret. The next day each of them tells 3 more people. If this pattern continues, how many people besides Erik will know the secret on Friday?

Sep 12-11:56 AM

1-2 Exponents

$7 \cdot 7 \cdot 7$ **Lesson Quiz**

Find each value.

1. 7^3 $= 3\ 49$ **2.** 6^3 $= 216$

3. 3^4 **4.** 8^5

Write each number using an exponent and given base.

5. 125, base 5 $5^3 = 125$

6. 16, base 2

7. Find the volume of a cube if each side is 12 inches long.

Course 2   Copyright © by Holt, Rinehart and Winston. All Rights Reserved.

Sep 15-9:47 AM