

ANSWERS

Exponents as Cubes

Whenever you use 3 as an exponent, you multiply a base number by itself twice.

Example: $2^3 = 2 \times 2 \times 2$

Remember, you can write this in words as "two to the power of three" OR "two to the third power."

You can also write it as:

Two cubed

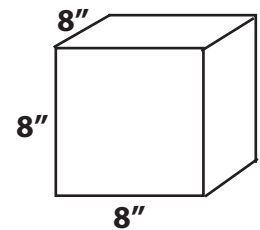
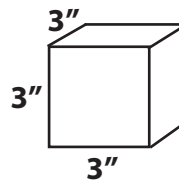
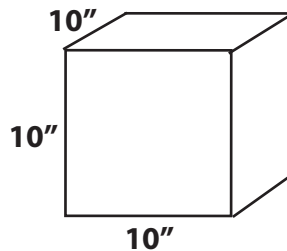
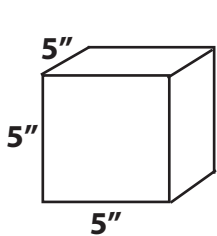
How Are Cubes Related to Exponents?

When you "cube" a number you are multiplying it by itself two times. This is also how you find the volume of a cube.

Let's Practice

Part 1

Record the answers for each problem on their answer lines.



Multiplication
Expression: $5 \times 5 \times 5$

Multiplication
Expression: $10 \times 10 \times 10$

Multiplication
Expression: $3 \times 3 \times 3$

Multiplication
Expression: $8 \times 8 \times 8$

Exponent
Expression: 5^3

Exponent
Expression: 10^3

Exponent
Expression: 3^3

Exponent
Expression: 8^3

Value: 125

Value: 1000

Value: 27

Value: 512

Part 2

Change the written form to its exponent form.

1. Ten cubed 10^3

2. Five cubed 5^3

3. Four cubed 4^3

4. Nine cubed 9^3