

Introduction to Exponents: What Is an Exponent?

An exponent is the simplest way to show how many times a number is multiplied by itself.

This example shows how to simplify an expression using exponents.

Example: $4 \times 4 \times 4 \times 4 \times 4$

The number 4 is multiplied by itself 5 times.

We can write

$$4^5$$

An **exponent** indicates how many times the base number is multiplied by itself.

The **base** is the number.

Write the following expressions using exponents.

$5 \times 5 \times 5 \longrightarrow \boxed{}$

$7 \times 7 \times 7 \times 7 \times 7 \times 7 \longrightarrow \boxed{}$

$3 \times 3 \times 3 \times 3 \longrightarrow \boxed{}$

$4 \times 4 \times 4 \times 4 \longrightarrow \boxed{}$

$9 \times 9 \longrightarrow \boxed{}$

$6 \times 6 \times 6 \times 6 \times 6 \longrightarrow \boxed{}$

$10 \times 10 \times 10 \times 10 \longrightarrow \boxed{}$

$1 \times 1 \times 1 \longrightarrow \boxed{}$