

### Power Expression

an **expression** that represents a repeated multiplication of the same factor

$$4^3$$

Base of the Power Expression

Exponent of the Power Expression

The **Exponent** determines the number of times the **Base** is multiplied by itself.

### Power Expression

an **expression** that represents a repeated multiplication of the same factor

$$6^2$$

Base of the Power Expression

Exponent of the Power Expression

The **Exponent** determines the number of times the **Base** is multiplied by itself.

### Power Expression

an **expression** that represents a repeated multiplication of the same factor

$$3^5$$

Base of the Power Expression

Exponent of the Power Expression

The **Exponent** determines the number of times the **Base** is multiplied by itself.

### Power Expression

an **expression** that represents a repeated multiplication of the same factor

$$x^4$$

Base of the Power Expression

Exponent of the Power Expression

The **Exponent** determines the number of times the **Base** is multiplied by itself.

### Power Expression

an **expression** that represents a repeated multiplication of the same factor

**5** factors of **2**

### Power Expression

an **expression** that represents a repeated multiplication of the same factor

**4** factors of **7**

## The Language of Exponents

Power

Exponent

Base

Words

$$3^1$$

$$5^2$$

$$4^3$$

$$x^4$$

Evaluate the following exponential expressions

15 to the first power

Eight squared

Six to the third power

$x$  to the sixth power

## Power Expression

an **expression** that represents a repeated multiplication of the same factor

**4**<sup>**3**</sup>

Base of the Power Expression

Exponent of the Power Expression

The **Exponent** determines the number of times the **Base** is multiplied by itself.

$$3 \text{ factors of } 4 = 4 \cdot 4 \cdot 4 = 64$$