

Using Exponents to Describe Numbers

Exponents

$$\textcircled{2^6} = 64$$

power

value (standard form)

where 2 is the **base**
6 is the **exponent**

We say that 64 is written as a power of 2.

$$\textcircled{2^6} = 64$$

↑ power
↓ value (standard form)

where 2 is the **base**
6 is the **exponent**

REPEATED MULTIPLICATION	EXPONENTIAL FORM	STANDARD FORM
$2 \times 2 \times 2$	2^3	8
$4 \times 4 \times 4$	4^3	64
$3 \times 3 \times 3 \times 3$	3^4	81
$(-2) \times (-2) \times (-2)$	$(-2)^3$	-8
$-(2 \times 2 \times 2 \times 2)$	-2^4	-16

We can write **repeated multiplication** in a shorter way called **exponential form**.