

Learning About Exponents #1

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

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

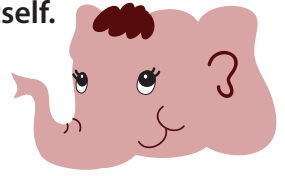
The number 4 is multiplied by itself 5 times.

We can write 4^5 ← *exponent* *Exponent is the number of times the base number is multiplied*
 4 ← *base* *Base is the number*

4^5 can be read as *four, raised to the fifth power* (the exponent is the power).

3^2 If the power is 2, we can read it as *three, raised to the second power* or *three squared*.

2^3 If the power is 3, we can read it as *two, raised to the third power* or *two cubed*.



Change the multiplication expressions to the exponents.

$3 \times 3 \times 3 \times 3 \rightarrow \square$

$6 \times 6 \times 6 \times 6 \times 6 \rightarrow \square$

$8 \times 8 \times 8 \rightarrow \square$

$7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 \rightarrow \square$

$1 \times 1 \rightarrow \square$

$5 \times 5 \times 5 \times 5 \times 5 \times 5 \rightarrow \square$

Write out the expressions below.

6^3 _____

8^6 _____

2^2 _____