INDICES

3^2 means 3×3 (3^2 is called "3 squared")

3^3 means $3 \times 3 \times 3$ (3^3 is called "3 cubed")

3^4 means $3 \times 3 \times 3 \times 3$

3^n means $3 \times 3 \times \ldots \times 3$ (n times)

examples: $5^3 = 5 \times 5 \times 5$

$9^4 = 9 \times 9 \times 9 \times 9$

$(-2)^3 = (-2) \times (-2) \times (-2)$

INDEX NOTATION

a^2 means $a \times a$ (we say "*a squared*")

a is called the base, 2 is called the exponent

a^3 means $a \times a \times a$ (we say "*a cubed*")

a^n means $a \times a \times \ldots\ldots \times a$ n times

NOTE: a^2 and a^3 are NOT like-terms

(so they **CANNOT** be combined together)