

Indices and Laws of Indices

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The index of a number shows how many times a number is multiplied by itself. The index is written as a superscript to a number. The number itself is known as a base. Plural of index is indices. Index is also known as power or exponent.

base \longrightarrow 2^3 \longleftarrow Index (power or exponent)

$$2^3 = 2 \times 2 \times 2 = 8$$

Without using calculator find the value of:

$2^3 =$ $4^2 =$ $2^2 =$ $9^2 =$ $7^2 =$ $3^2 =$ $4^2 =$

$7^0 =$ $6^3 =$ $2^5 =$ $4^3 =$ $3^0 =$ $6^2 =$ $8^3 =$

$6^4 =$ $2^6 =$ $3^5 =$ $1^2 =$ $7^2 =$ $3^2 =$ $4^2 =$

$7^3 =$ $8^2 =$ $2^5 =$ $9^1 =$ $3^0 =$ $5^2 =$ $7^3 =$

$2^3 =$ $4^3 =$ $2^4 =$ $6^2 =$ $7^2 =$ $3^5 =$ $5^3 =$

$1^9 =$ $6^4 =$ $6^3 =$ $8^3 =$ $3^0 =$ $6^2 =$ $2^5 =$

$6^4 =$ $2^7 =$ $3^5 =$ $9^3 =$ $7^2 =$ $3^2 =$ $4^2 =$

$3^4 =$ $8^0 =$ $2^7 =$ $7^2 =$ $3^0 =$ $5^2 =$ $7^4 =$