

Order of Operations with Exponents

6th Grade

PEMDAS once powers are in the mix.

The order never changes. Exponents sit second, above multiplication.

1

BRACKETS

Innermost first, working outwards.

2

EXPONENTS

Powers and roots, before any multiplying.

3

MULTIPLY AND DIVIDE

Equal rank — left to right, whichever comes first.

4

ADD AND SUBTRACT

Equal rank — left to right.

WORKED: $4 + 3 \times 2^3$

$2^3 = 8$ first

$3 \times 8 = 24$

$4 + 24 = 28$ (not 56)

$8 \div 2 \times 4 = 16$, not 1. $\times$ and $\div$ share a rank, so it is strictly left to right.