

Order of Operations

1. Grouping symbols: $()$, $[\]$, $\{ \}$, $\sqrt{\quad}$, $\frac{\quad}{\quad}$ (fraction bar)
2. Exponents or roots from left to right
3. Multiplication or division from left to right
4. Addition or subtraction from left to right

Ex 1.

Simplify $18 \div 2 \cdot 3 - 2 \cdot (3^2 - 7)$

Ex 2.

Simplify $5^3 - 3[(6 + 14) \div (3 + 2)] + \sqrt{36 \div 9}$

Ex 3.

Simplify $\frac{12^2-24}{42-3(9-7)^2}$

The sum of a list of values divided by the number of values is called the _____.
This gives us a single number to measure the “center” of the list of values.

Ex 4.

Find the arithmetic mean of 2, 2, 3, 4, and 9.

The middle value in an ordered list of values is called the _____.
This gives us another measure of the “center” of a list of values.

Ex 5.

Find the median of 91, 67, 82, 95, and 100.

Ex 6.

Find the median of 2, 5, 4, and 1.