

To solve expressions that have many operations, use the order of operations. The order of operations can be remembered by the acronym **BEDMAS**.

B	Brackets	
E	Exponents	
D	Division	Do these in order from left to right.
M	Multiplication	
A	Addition	Do these in order from left to right.
S	Subtraction	

The order of operations will help you remember the order in which to do the mathematical calculations.

Example

Calculate $(-3)^2 \times 1.4 + 3.5 - 3.1$ using the order of operations.

Solution

Apply BEDMAS to evaluate the expression.

Step 1

There are no brackets. Evaluate the exponent.

$$\begin{aligned} &= (-3)^2 \times 1.4 + 3.5 - 3.1 \\ &= 9 \times 1.4 + 3.5 - 3.1 \end{aligned}$$

Step 2

Complete the multiplication and division in the order that it appears from left to right.

$$\begin{aligned} &= 9 \times 1.4 + 3.5 - 3.1 \\ &= 12.6 + 3.5 - 3.1 \end{aligned}$$

Step 3

Complete the addition and subtraction in the order that it appears from left to right.

$$\begin{aligned} &= 12.6 + 3.5 - 3.1 \\ &= 16.1 - 3.1 \\ &= 13 \end{aligned}$$

Therefore: $(-3)^2 \times 1.4 + 3.5 - 3.1 = 13$