

Orders of Operations

Concept

PEMDAS

P	P arenthesis, ()
E	E xponents, a^n
M D	M ultiplication or D ivision (Left to right)
A S	A ddition or S ubtraction (Left to Right)

Example

$$\begin{aligned} & 3 \times (3 + 7) - 4^2 \div 2 \\ &= 3 \times 10 - 4^2 \div 2 \\ &= 3 \times 10 - 16 \div 2 \\ &= 30 - 8 \\ &= 22 \end{aligned}$$

Assignment

Q.1

$$4 + 6 \div 9$$

Q.2

$$8(2 - 5) - 3(-4)$$

Q.3

$$(5 + 10) \div (6 - 7)$$

Q.4

$$(3 - 8) - 8 + 4(2)$$

Q.5

$$(9 - 15 \div 3)$$

Q.6

$$-2(6 - 9) - 10$$

Q.7

$$(12 - 18) - 10 + 8(4)$$

Q.8

$$(9 - 60 \div 3)$$

Q.9

$$-2(16 + 99) - 10$$

Q.10

$$7 + 2(3) - 19$$

Q.11

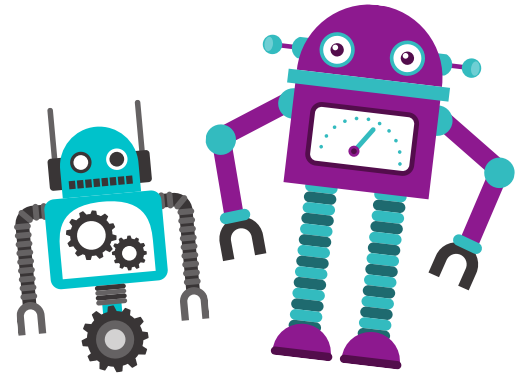
$$5^2 - 6 + 3$$

Q.12

$$9(4 + 6) \div 9$$

Order of Operations

Use the order of operations to simplify the expressions.



$$5^2 - 6 + 3$$

$$7 + 2(3) - 19$$

$$9(7 - 3) \div 6 + 2$$

$$4^2 + 6^2 \div 9$$

$$8(2 - 5) - 3(-4)$$

$$(5 + 10) \div (6 - 7)$$

$$(3 - 8)^2 - 8 + 4(2)$$

$$(9 - 15 \div 3)^2$$

$$-2(6 - 9)^2 - 10$$

