

When performing calculations, there is a specific order you must follow in order to get a correct answer. Often the acronym used to remember the order is **BIDMAS** or **BODMAS**. B=brackets, I=indices (O=of), D=division, M=multiplication, A=addition, S=subtraction. Once you perform calculations in this order, you should get a correct answer.

$$\begin{aligned} \text{eg. } & 3 + \frac{1}{2} \text{ of } 10 - 3 \\ & = 3 + 5 - 3 \\ & = 5 \end{aligned}$$

$$\begin{aligned} \text{eg. } & 4 + 2 \times 3 - 7 \\ & = 4 + 6 - 7 \\ & = -1 \end{aligned}$$

$$\begin{aligned} \text{eg. } & 5 + (6 - 2) \div 2 \\ & = 5 + 4 \div 2 \\ & = 5 + 2 \\ & = 7 \end{aligned}$$

1. Calculate the value of the following:

a) $10 - 9 \div 3$ b) $3 \times 6 \div 3^2$ c) $6^2 \div (4 + 2)$ d) $(6 + 2^4) \times 10$ e) $3 \times 6 + 9^2$

f) $6 \times 3 - 4$ g) $4^2 \div (3 - 5)$ h) $5^3 - 12 \div 6$ i) $(9 - 5)^2 \div 2$ j) $(3 - 5)^3 - 3$

2. Calculate the value of the following:

a) $-2 + 9 \times 10$ b) $2 + 3 \times 10$
 5^2 c) $3^2 - (-8 + 3)$ d) $(6 - 2^4) + 10$ e) $3^2 \times 2^2 +$

f) $(4 + 3 \div 6)$ g) $(9 - 5)^2 - 4$ h) $5 - (-12 \div 6)$ i) $4 - 2^2 + 5$ j) $(1 - 5)^2 \div (-2^2)$

3. Calculate the value of the following:

a) $3 + 4 \times (3 + 5)$ b) $(7 - 3) \times 3 + 2$ c) $9 - 2 + 4(2 + 4)$ d) $9 + 6 \div 3 - (4 \times 2)$

4. Calculate the value of the following:

a) $(12 - 9)^2 + (20 \div 10)$ b) $4^3 - (125 \div 25)$ c) $5^2 \div 10 - 12^2$

d) $6 + 3^2 \times 2$

e) $6 + \left(3^2 - \frac{8}{4}\right) \times 2$

f) $6 + 3^2 - \left(\frac{8}{4} \times 2\right)$