

C1: Order of operations (BODMAS)

B	Brackets - Square numbers and roots
O	Of (Means Multiply)
DM	Multiplication and Division (From left to right)
AS	Add and Subtract (From left to right)

EXAMPLE:

$$\begin{aligned}
 &2 \times 3 + 4 \div 2 + (9 - 1) - \frac{1}{2} \text{ of } 8 && \textit{First the brackets} \\
 &= 2 \times 3 + 4 \div 2 + 8 - \frac{1}{2} \times 8 && \textit{of (this is multiplication)} \\
 &= 2 \times 3 + 4 \div 2 + 8 - 4 && \textit{then multiply and divide from left to right} \\
 &= 6 + 2 + 8 - 4 && \textit{then add and subtract from left to right} \\
 &= \underline{\underline{12}}
 \end{aligned}$$

Exercise 1: BODMAS

Determine the following: (You may use your calculator):

(a)	$2(2 - 3)^2 - 6 \div 2$	(i)	$6 \times 8 \div 2 + 3$
(b)	$5^2 - \sqrt{42 - 6}$	(j)	$983,5 - 100 - 10$
(c)	$R450 - R32,50 \times 10$	(k)	$325 - 36,3 \div 0,3 + 100$
(d)	$58 \div 2 + 2 \times 4 - \frac{2}{3} \text{ of } 30$	(l)	$3 \times 7 - 11 \div 2 \times 6 + 1$
(e)	$10\,000 \times 100 - 10 \times 10 + 10$	(m)	$1 \times 1 - 1 + 1 \div 1 + 1^2$
(f)	$10\,000(1,01)^2 - 1 \times 1$	(n)	$3,6(2,01 + 102,5)$
(g)	$20 - \frac{3}{5} \text{ of } 205$	(o)	$\frac{2}{5} \begin{pmatrix} 4 \\ 1 & 4 \\ & 1 & 9 \end{pmatrix} - 1$

