

## Order of operations

**P**arentheses or Groupings  
( ) [brackets] — fraction bar

**E**xponents

**MD** multiply or Divide  
From left to Right

**AS** Add or subtract  
from left to right

$$\begin{aligned} \textcircled{1} \quad & 54 \div 27 \cdot (-2) \\ & \frac{54}{27} \cdot (-2) \\ & = \textcircled{-4} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & -60 \div [12 \div (-3)] \\ & -60 \div [-4] \\ & +15 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 4[27 + 108 \div (-9)] \\ & 4[27 + (-12)] \\ & 4[27 - 12] \\ & 4[15] \\ & = \textcircled{60} \end{aligned}$$

$$\textcircled{4} \quad \frac{9^2}{3} + 4$$

$$\frac{81}{3} + 4$$

$$27 + 4 = \textcircled{31}$$

$$\textcircled{5} \quad \frac{2[18 \div 2 - (-2)]}{4^2 \div 8} \quad \begin{array}{l} P \\ E \end{array}$$

$$\frac{2[9 - (-2)]}{4^2 \div 8} \quad \begin{array}{l} MD \\ AS \end{array}$$

$$\frac{2[9 + 2]}{4^2 \div 8}$$

$$\frac{2[11]}{16 \div 8} = \frac{22}{2} = \textcircled{11}$$