

# Order of Operations (PEMDAS)

A visual guide for solving math expressions correctly

| Step | Operation                 | What It Means                              |
|------|---------------------------|--|
| P    | Parentheses               | Solve expressions inside parentheses first |
| E    | Exponents                 | Evaluate powers and roots                  |
| MD   | Multiplication & Division | Work left to right                         |
| AS   | Addition & Subtraction    | Work left to right                         |

## Worked Example

Solve the expression:

$$6 + 18 \div (3 \times 3)$$

**Step 1:** Parentheses  $\rightarrow 3 \times 3 = 9$

**Step 2:** Division  $\rightarrow 18 \div 9 = 2$

**Step 3:** Addition  $\rightarrow 6 + 2 = 8$

## Common Mistakes to Avoid

- Solving addition before multiplication or division
- Forgetting to work left to right for multiplication and division
- Ignoring parentheses in complex expressions