

Order of Operations (BODMAS)

Chapter 2: Arithmetic Expressions · Topic 2

Key Concept

A common point of confusion is that division and multiplication have equal priority (performed left to right, whichever comes first), and similarly for addition and subtraction — BODMAS does not mean all multiplication happens before all division, or vice versa. Without a universally agreed order like BODMAS, the same expression could be interpreted differently by different people, leading to inconsistent results — this is why the rule is essential in mathematics, science, and even computer programming.

Quick Revision Notes

- BODMAS: Brackets, Order (powers), Division/Multiplication (left to right), Addition/Subtraction (left to right).
- Division and multiplication have equal priority; performed left to right as they appear.
- Addition and subtraction also have equal priority; performed left to right.
- BODMAS ensures consistent results when evaluating any arithmetic expression.

Practice Questions

- 1 Evaluate: $(5+3) \times 2 - 4$.
- 2 Evaluate: $20 \div 4 + 3 \times 2$.
- 3 Explain why BODMAS is necessary when evaluating a mathematical expression.