

Factorisation Using Distribution

Chapter 6: We Distribute, Yet Things Multiply · Topic 2

Key Concept

To factorise correctly, first find the highest common factor (HCF) of the numerical coefficients (and any common variable, if present), then divide each term by this common factor to determine what remains inside the brackets. Factorisation is an essential algebraic skill used to simplify expressions, solve equations, and is a stepping stone towards factorising more complex quadratic expressions in higher classes.

Quick Revision Notes

- Factorisation identifies a common factor and rewrites an expression as a product.
- Example: $12x+18 = 6(2x+3)$, since 6 is the HCF of 12 and 18.
- Find the HCF of all terms' coefficients (and common variables) before factorising.
- Factorisation is foundational for solving equations and factorising quadratics later.

Practice Questions

- 1 Factorise the expression $5y+15$.
- 2 Factorise $9a+12b$, identifying the HCF first.
- 3 Explain how factorisation is the reverse process of distribution.