

Framing Algebraic Expressions

Chapter 21: Framing Algebraic Expressions · Topic 1

Key Concept

Phrases like 'a number increased by 5' translate to the expression $x + 5$, using a variable for the unknown number.

'Twice a number' becomes $2x$, and 'a number decreased by 3' becomes $x - 3$, showing how words become expressions.

Careful reading is essential to correctly identify the operation (addition, subtraction, multiplication, division) needed.

Practising framing expressions helps us translate real-world word problems into solvable algebraic forms.

Quick Revision Notes

- Framing expressions translates words to algebra.
- 'A number increased by 5' becomes $x + 5$.
- 'Twice a number' becomes $2x$.
- 'A number decreased by 3' becomes $x - 3$.
- Careful reading identifies the right operation.
- This connects word problems to algebra.
- Practice builds translation skills.
- This is essential for solving word problems.

Practice Questions

- 1 Write an expression for 'a number increased by 8'.
- 2 Write an expression for 'three times a number'.
- 3 Write an expression for 'a number decreased by 4'.
- 4 Translate 'half a number plus 3' into an expression.
- 5 Discuss why careful reading matters here.
- 6 Create three of your own word-to-expression translations.