

Formulate algebraic expressions using constants, variables, operations and brackets

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Learning intention

- formulate algebraic expressions using constants, variables, operations and brackets

Teach and model

- generalising arithmetic expressions to algebraic expressions involving constants, variables, operations and brackets; for example...
- formulating algebraic expressions that represent mathematical relationships; for example, translating from words to symbols, “think of a number” type of activities

Check understanding

- Explain the main idea in formulate algebraic expressions using constants, variables, operations and brackets using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.