

Follow and create algorithms involving a sequence of steps and...

follow and create algorithms involving a sequence of steps and decisions that use addition or multiplication to generate sets of numbers; identify and describe any emerging patterns

Learning intention

- follow and create algorithms involving a sequence of steps and decisions that use addition or multiplication to generate sets of numbers; identify and describe any...

Teach and model

- creating an algorithm that will generate number sequences involving multiples of one to 10 using digital tools to assist, identifying and explaining emerging...
- creating a basic flow chart that represents an algorithm that will generate a sequence of numbers using multiplication by a constant term; using a calculator to model...
- using a multiplication formula in a spreadsheet and the "fill down" function to generate a sequence of numbers; for example, entering the number one in the cell...

Check understanding

- Explain the main idea in follow and create algorithms involving a sequence of steps and... 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.