

Generate tables of values from visually growing patterns or the...

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Learning intention

- generate tables of values from visually growing patterns or the rule of a function; describe and plot these relationships on the Cartesian plane

Teach and model

- plotting points from a table of values generated using simple linear functions and recognising patterns, such as the points lie on a straight line
- discussing and using variables to create a general rule and use the rule to determine the value of the dependent variable for any given value of the independent variable; for...
- using function machines to generate a table of ordered pairs using input and output values, plotting the relationships on a Cartesian plane and describing the graph in...

Check understanding

- Explain the main idea in generate tables of values from visually growing patterns or the... 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.