

Find unknown values in numerical equations involving brackets and combinations...

find unknown values in numerical equations involving brackets and combinations of arithmetic operations, using the properties of numbers and operations

Learning intention

- find unknown values in numerical equations involving brackets and combinations of arithmetic operations, using the properties of numbers and operations

Teach and model

- using brackets and the order of operations to write number sentences and appreciating the need for an agreed set of rules to complete multiple operations within the...
- constructing equivalent number sentences involving brackets and combinations of the 4 operations; explaining the need to have shared agreement on the order of operations...
- finding pairs of unknown values in numerical equations that make the equation hold true; for example, listing possible combinations of natural numbers that make this statement...

Check understanding

- Explain the main idea in find unknown values in numerical equations involving brackets and combinations... 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.