

Mathematical modelling to solve practical problems involving additive and multiplicative...

use mathematical modelling to solve practical problems involving additive and multiplicative situations, including money transactions; represent situations and choose calculation strategies; interpret and communicate solutions in terms of the situation

Learning intention

- use mathematical modelling to solve practical problems involving additive and multiplicative situations, including money transactions; represent situations and...

Teach and model

- modelling practical problems by interpreting an everyday additive or multiplicative situation; for example, making a number of purchases at a store and deciding whether...
- modelling and solving simple money problems involving whole dollar amounts with addition, subtraction, multiplication or division; for example, if each member of our...
- modelling and solving practical problems such as deciding how many people should be in each team for a game or sports event, how many teams for a given game can be...

Check understanding

- Explain the main idea in mathematical modelling to solve practical problems involving additive and multiplicative... 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.