

Solve problems involving the area of triangles and parallelograms using...

solve problems involving the area of triangles and parallelograms using established formulas and appropriate units

Learning intention

- solve problems involving the area of triangles and parallelograms using established formulas and appropriate units

Teach and model

- using the formula for the area of a rectangle and the array structure to derive the formula for the area of a triangle and the area of a parallelogram, given their perpendicular...
- using dynamic geometry software to demonstrate how the sliding of the vertex of a triangle at a fixed altitude opposite a side leaves the area of the triangle unchanged
- using established formulas to solve practical problems involving the area of triangles, parallelograms and rectangles; for example, estimating the cost of materials needed to...

Check understanding

- Explain the main idea in solve problems involving the area of triangles and parallelograms using... 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.