

Classify triangles, quadrilaterals and other polygons according to their side...

classify triangles, quadrilaterals and other polygons according to their side and angle properties; identify and reason about relationships

Learning intention

- classify triangles, quadrilaterals and other polygons according to their side and angle properties; identify and reason about relationships

Teach and model

- using strips of paper with parallel sides to make triangles and quadrilaterals, and contrasting the rigidity of triangles with the flexibility of quadrilaterals
- constructing triangles with 3 given side lengths and discussing the question, "Can any 3 lengths be used to form the sides of a triangle?"
- identifying and communicating about side and angle properties of scalene, isosceles, equilateral, right-angled, acute and obtuse triangles using geometric conventions

Check understanding

- Explain the main idea in classify triangles, quadrilaterals and other polygons according to their side... 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.