

Corresponding, alternate and co-interior relationships between angles formed when parallel...

identify corresponding, alternate and co-interior relationships between angles formed when parallel lines are crossed by a transversal; use them to solve problems and explain reasons

Learning intention

- identify corresponding, alternate and co-interior relationships between angles formed when parallel lines are crossed by a transversal; use them to solve problems and...

Teach and model

- constructing a pair of parallel lines and a pair of perpendicular lines using their properties, a pair of compasses and a ruler, set squares or using dynamic geometry software
- using dynamic geometry software to identify relationships between alternate, corresponding and co-interior angles for a pair of parallel lines cut by a transversal
- using dynamic geometry software to demonstrate how angles and their properties are involved in the design and construction of scissor lifts, folding umbrellas, toolboxes...

Check understanding

- Explain the main idea in corresponding, alternate and co-interior relationships between angles formed when parallel... 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.