

The relationships between angles on a straight line, angles at...

identify the relationships between angles on a straight line, angles at a point and vertically opposite angles; use these to determine unknown angles, communicating reasoning

Learning intention

- identify the relationships between angles on a straight line, angles at a point and vertically opposite angles; use these to determine unknown angles, communicating...

Teach and model

- using protractors or dynamic geometry software to measure and generalise about the size of angles formed when lines are crossed, and combinations of angles that...
- demonstrating the meaning of language associated with properties of angles, including right, complementary, complement, straight, supplement, vertically...
- using the properties of supplementary and complementary angles to represent spatial situations with number sentences and solving to find the size of unknown angles

Check understanding

- Explain the main idea in the relationships between angles on a straight line, angles at... 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.