

Intersecting Lines and Transversals

Chapter 5: Parallel and Intersecting Lines · Topic 2

Key Concept

When a transversal crosses two parallel lines specifically, corresponding angles are always equal, and alternate interior angles are also always equal — these relationships are extremely useful for finding unknown angles in geometric diagrams without needing to measure them directly. If a transversal crosses two lines and corresponding angles are found to be equal, this can even be used as proof that the two lines must be parallel.

Quick Revision Notes

- Intersecting lines cross at exactly one point, forming angles.
- A transversal is a line crossing two or more other lines, creating angle pairs.
- For parallel lines cut by a transversal: corresponding angles are equal, alternate angles are equal.
- Equal corresponding angles can be used as proof that two lines are parallel.

Practice Questions

- 1 Identify pairs of corresponding angles in a transversal diagram.
- 2 If one angle formed by a transversal is 70° , find its corresponding angle.
- 3 Explain how equal corresponding angles can prove two lines are parallel.