

GRADE 7 MATHEMATICS

Parallel and Intersecting Lines

"Ever wondered how artists create perfect straight lines in their artwork?"

In this module, you will:

- Understand Parallel and Intersecting Lines
- See how it works in the real world
- Master the basics in 10 minutes

The Big Picture

02

Before we dive into details, let's understand what is really happening here.

- Parallel lines never touch, no matter how far they're extended.
- Intersecting lines meet at a single point and form angles.
- Perpendicular lines meet at a right angle (90°).



Why this matters

Understanding parallel and intersecting lines is essential in art, architecture, and engineering.

What are Parallel Lines?

Parallel lines are lines that lie on the same plane and never meet, no matter how far you extend them.

What are Intersecting Lines?

Intersecting lines are lines that meet at a single point and form angles.

What are Perpendicular Lines?

Perpendicular lines are lines that meet at a right angle (90°).



Think of it like...

Examples of parallel lines like railway tracks or a horizon line in a landscape painting.



In Reality...

When two lines intersect, they form four angles, and opposite angles are equal.

Let's map this out simply.

Draw two lines on a plain sheet of paper and measure the angles formed.



Identify linear pairs and vertically opposite angles in a diagram.



Recognize parallel lines in a diagram and use arrow marks to show they're parallel.



Draw a transversal to form eight angles with a maximum of four distinct angle measures.

Pause & Think

06

Let's stop for a moment. Don't worry about getting the "right" answer yet.



**Can you think of a real-life scenario where
parallel lines are used?**

Take 30 seconds to think about this.

Quick Check

07

Let's see what you've got.

? What is the sum of adjacent angles formed by two intersecting lines?

Answer: 180°

? How many angles are formed when a transversal intersects two lines?

Answer: 8

Key Takeaways

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- Parallel lines never touch, no matter how far they're extended.
- Intersecting lines meet at a single point and form angles.
- Perpendicular lines meet at a right angle (90°).



Confidence Boost

You now understand the basics of parallel and intersecting lines – great job!