

GRADE 7 MATHEMATICS

Parallel and Intersecting Lines

"Ever wondered how we can tell if two lines are parallel or intersecting?"

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

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

- Lines can be parallel or intersecting
- Parallel lines lie on the same plane and never meet
- Intersecting lines meet at a point and form angles



Why this matters

Understanding parallel and intersecting lines is important in architecture, design, and even navigation.

What are Parallel Lines?

Parallel lines are two lines that lie on the same plane and never meet, no matter how far they are extended.

What are Intersecting Lines?

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

Linear Pairs and Vertically Opposite Angles

When two lines intersect, they form linear pairs and vertically opposite angles. Linear pairs add up to 180° , while vertically opposite angles are equal to each other.



Think of it like...

Parallel lines are like railway tracks that never meet, while intersecting lines are like roads that meet at a crossroads.



In Reality...

When two lines intersect, they form four angles. These angles can be equal or supplementary to each other.

Let's map this out simply.

Draw two lines on a plain sheet of paper so that they intersect.



Measure the four angles formed with a protractor.



Look for linear pairs and vertically opposite angles.



Draw a pair of lines and a transversal to form two distinct angles.

Pause & Think

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



**Can you think of a real-life example where
parallel or intersecting lines are used?**

Take 30 seconds to think about this.

Quick Check

07

Let's see what you've got.

? What are parallel lines?

Answer: Two lines that lie on the same plane and never meet.

? What is a linear pair?

Answer: Two angles that add up to 180° and are formed by two intersecting lines.

Key Takeaways

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- Parallel lines lie on the same plane and never meet.
- Intersecting lines meet at a point and form angles.
- Linear pairs and vertically opposite angles are formed by intersecting lines.



Confidence Boost

You now have a solid understanding of parallel and intersecting lines. Keep practicing and you'll be a pro in no time!