

3rd Grade Math: Right Angles

What Is a Right Angle?

A **right angle** is an angle that measures **exactly 90 degrees**. It looks like the corner of a square or rectangle, forming a perfect "**L**" shape. Right angles are very common and appear in many objects, like books, doors, and windows.

Key Features of a Right Angle

1. Measures exactly 90 degrees: Not more, not less.
2. Forms a perfect "L" shape.
3. Found in squares and rectangles: Every corner of a square or rectangle is a right angle.

Identifying a Right Angle

1. **Look for the "L" shape:**

If the two sides of an angle form a perfect "L", then it is a right angle.

2. **Use a square corner:**

You can use a piece of paper or a ruler to check if an angle is a right angle. Line up the corner of the paper with the angle. If they match, it's a right angle.

3. **Check the measurement:**

A right angle measures **exactly 90 degrees**. If you have a protractor, you can measure the angle to confirm it's 90 degrees.

Example 1: Right Angles in a Square

Problem:

Each corner of a square is a right angle. How many right angles are there in total in a square?

Solution:

A square has 4 corners, and each corner forms a right angle. Therefore, a square has **4 right angles**.

Example 2: Right Angles in Everyday Objects

Problem:

Look at the corner of a piece of paper. What type of angle does it form?

Solution:

The corner of a piece of paper forms a **right angle** because it creates a perfect "L" shape and measures 90 degrees.

Example 3: Identifying a Right Angle in a Triangle

Problem:

In a triangle, one of the angles forms a perfect "L" shape. What type of triangle is this?

Solution:

If one of the angles in a triangle is a right angle, it is called a **right triangle**. A right triangle has one right angle that measures exactly 90 degrees.

Right Angles in Shapes

- **Square:** All four corners (or angles) are right angles.
- **Rectangle:** All four corners are right angles.
- **Right Triangle:** One of the three angles is a right angle.

Conclusion:

- A **right angle** is an angle that measures exactly **90 degrees**.
- Right angles are very common in geometry and everyday objects.
- **Squares** and **rectangles** have four right angles, while a **right triangle** has one.
- Recognizing right angles helps with understanding the properties of shapes and solving geometry problems.