Triangles can be classified into different types based on the lengths of their sides and the measures of their angles. Here are the main types of triangles:

1. **By Sides:**

- o **Equilateral Triangle:** All three sides are of equal length.
- o **Isosceles Triangle:** At least two sides are of equal length.
- Scalene Triangle: All three sides have different lengths.

2. By Angles:

- o **Acute Triangle:** All angles are less than 90 degrees.
- o **Right Triangle:** One angle is exactly 90 degrees (formed by one side being perpendicular to another).
- o **Obtuse Triangle:** One angle is greater than 90 degrees.

3. By Sides and Angles Combined:

- o **Equiangular Triangle:** All angles are equal, making it equilateral as well.
- o **Isosceles Right Triangle:** One angle is 90 degrees, and the two shorter sides are of equal length.

These classifications are not mutually exclusive; a triangle can fall into more than one category simultaneously. For example, an equilateral triangle is also equiangular and acute.