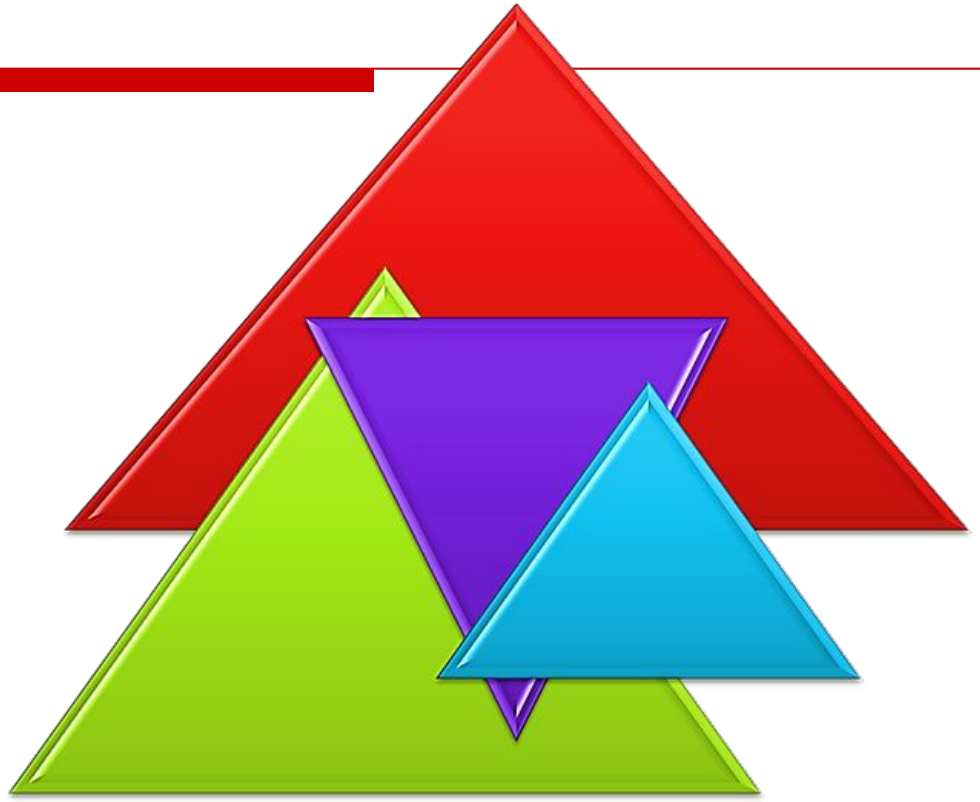
Angles and Triangles

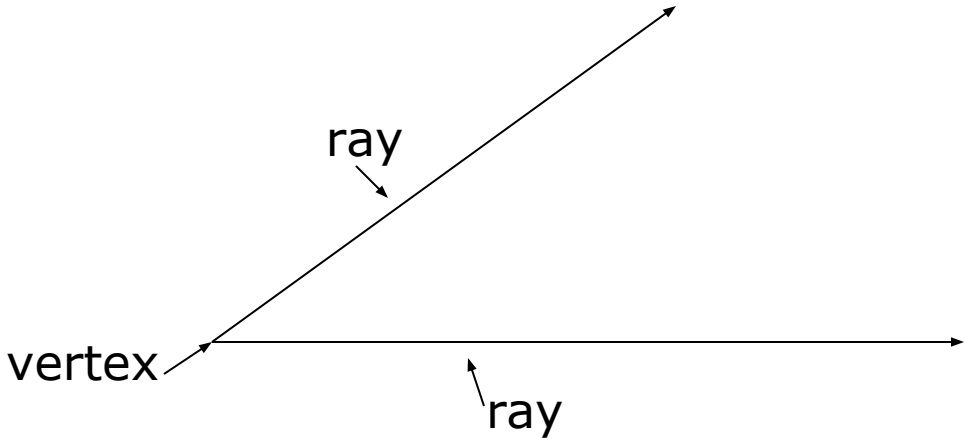


Presentation plan

- Angles
- Types of Angles
- Straight Angle
- Types of Triangles
- Interior Angles
- Measuring Angles

Angles

- A shape formed by two rays sharing a common endpoint; contains two rays and a vertex

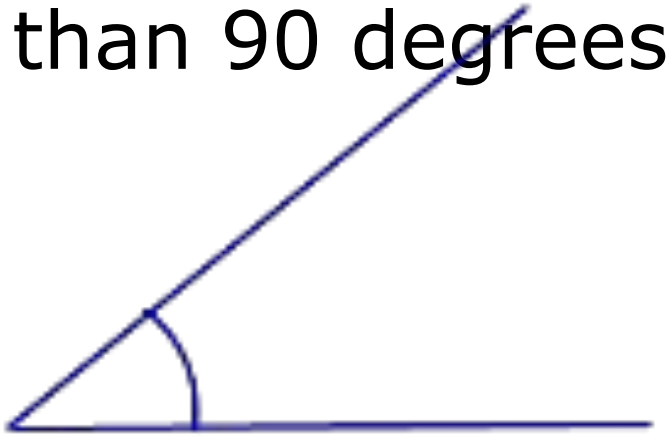


vertex—point common to two rays of a triangle or two sides of a polygon

ray—has one endpoint and goes infinitely in one direction

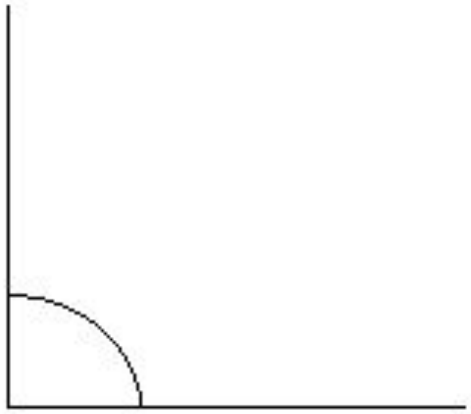
Types of Angles

- **Acute angle:** An angle whose measure is greater than zero degrees and less than 90 degrees



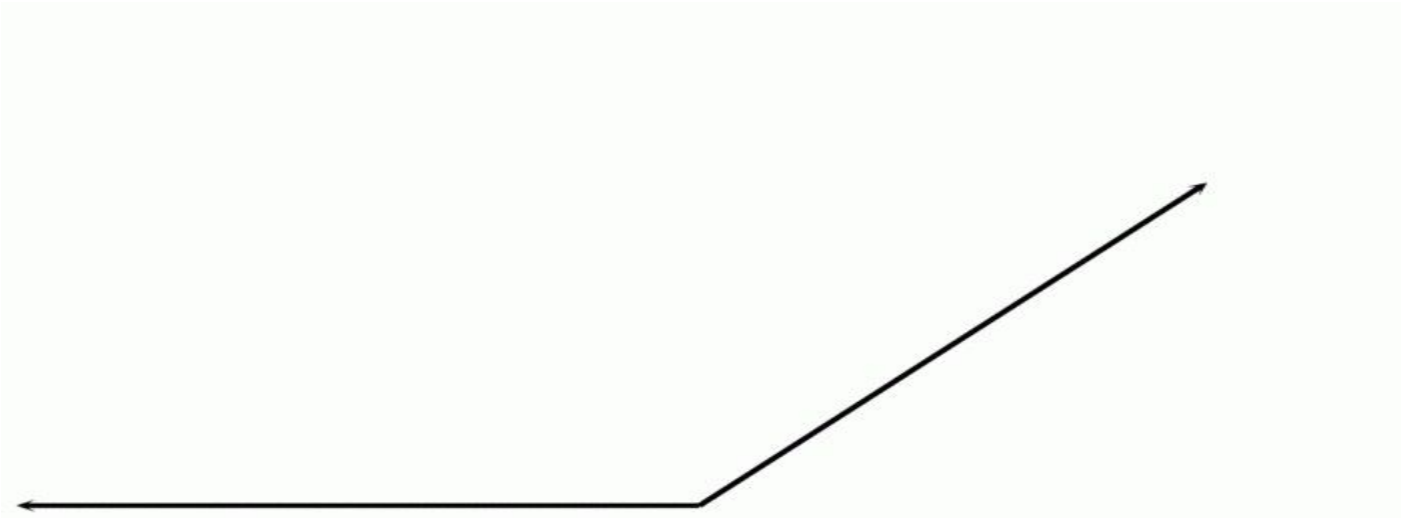
Types of Angles

- **Right angle:** Angle that measures 90 degrees



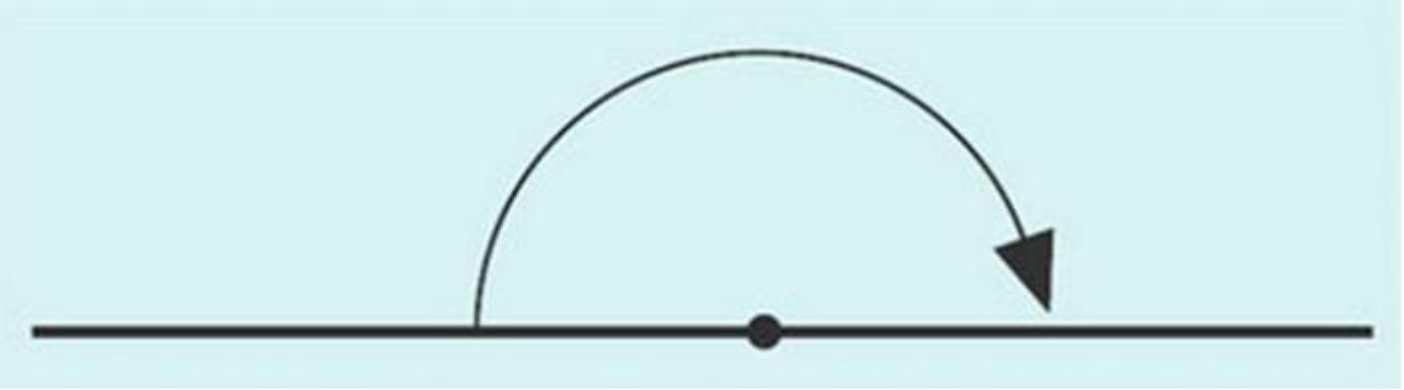
Types of Angles

- **Obtuse angle:** One angle measures greater than 90 degrees and less than 180 degrees



Straight Angle

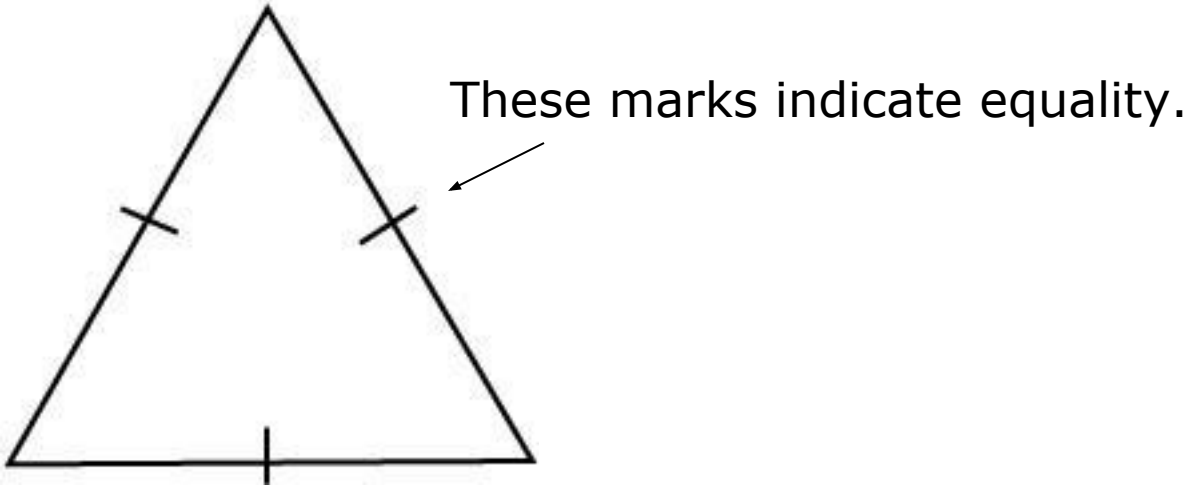
- **Straight angle:** A line that goes infinitely in both directions and measures 180 degrees



This is a ray. It only goes in one direction.

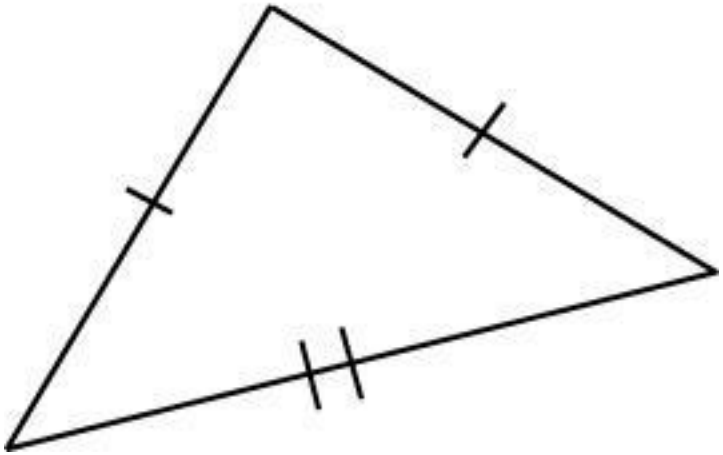
Types of Triangles

- **Equilateral triangle:** A triangle with three congruent (equal) sides and three equal angles



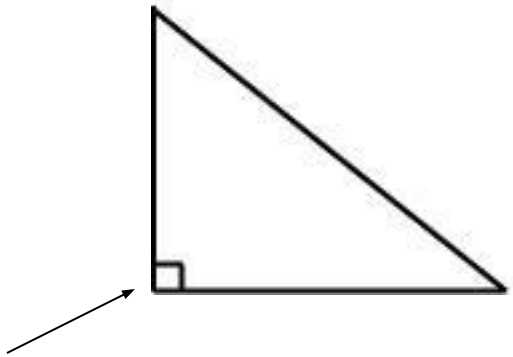
Types of Triangles

- **Isosceles triangle:** A triangle with at least two congruent (equal) sides



Types of Triangles

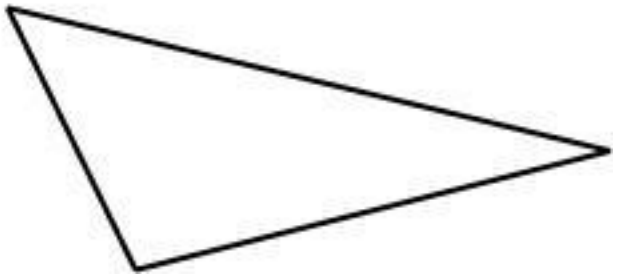
- **Right triangle:** Has only one right angle (90 degrees)



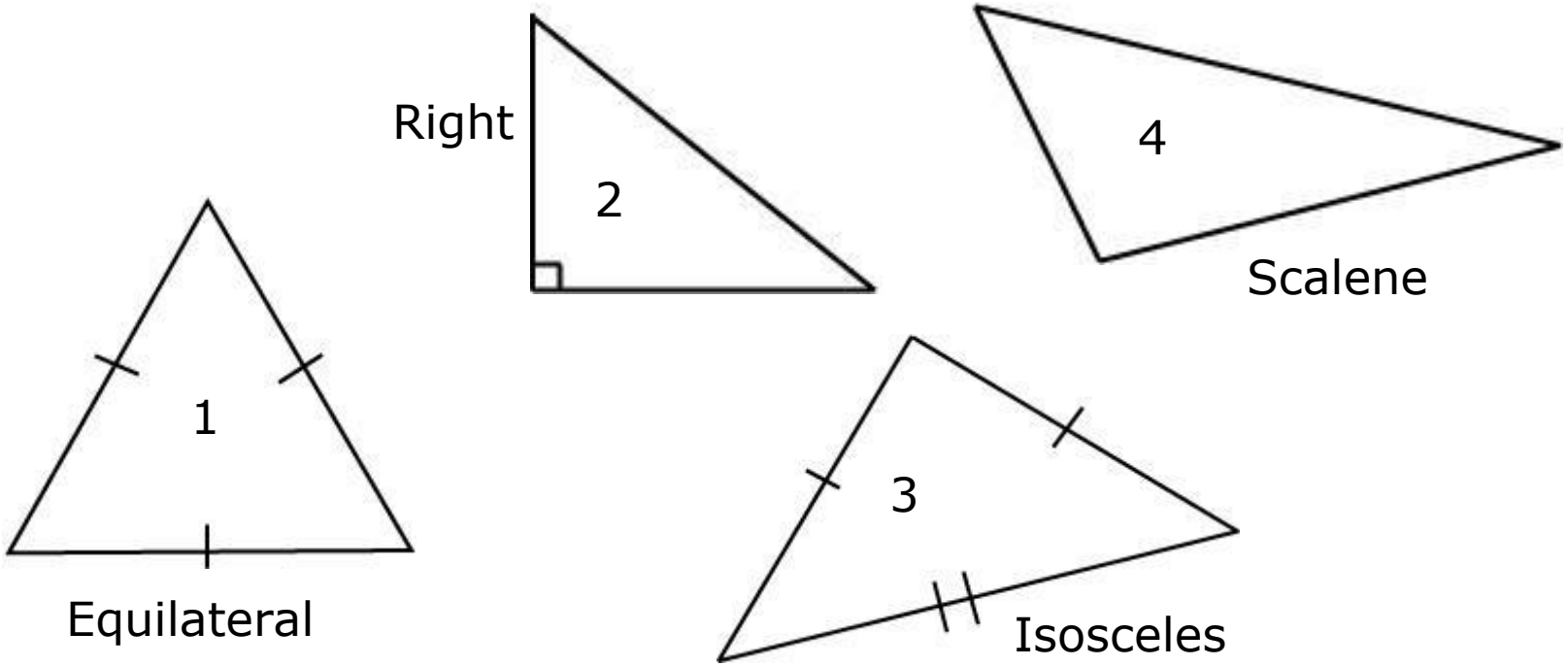
This box indicates a right angle or a 90-degree angle.

Types of Triangles

- **Scalene triangle:** A triangle that has no congruent (equal) sides



Types of Triangles



Interior Angles

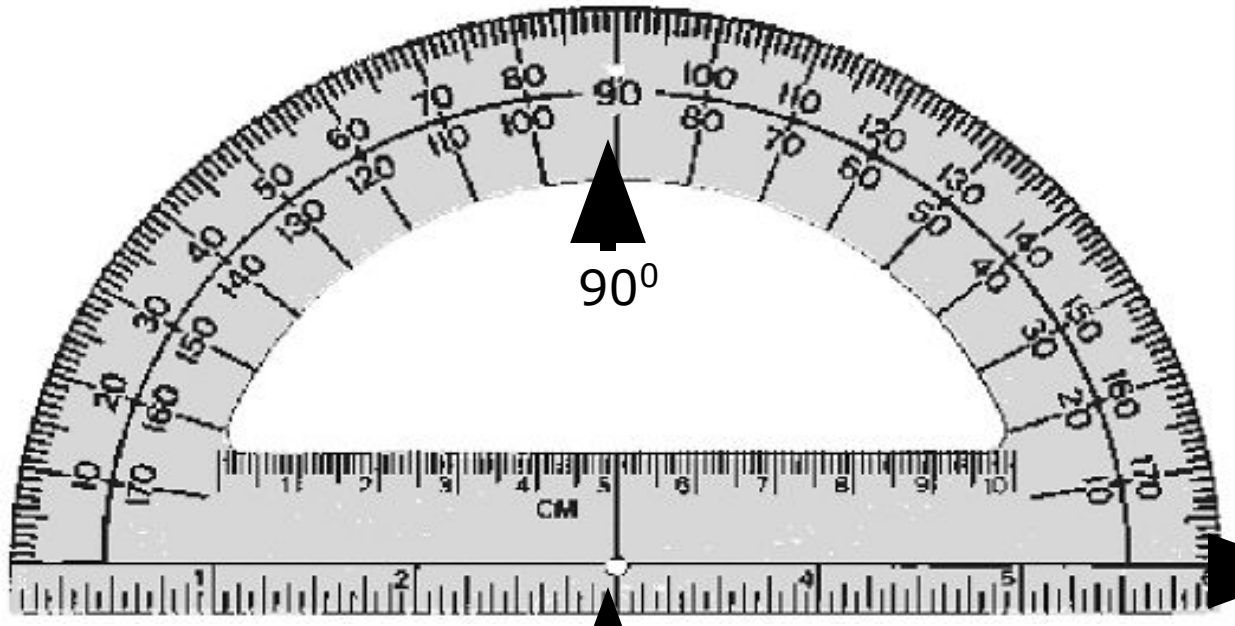
- **Interior angles:** An **interior angle** (or **internal angle**) is an angle formed by two sides of a simple polygon that share an endpoint

- Interior angles of a triangle always equal 180 degrees.

Measuring Angles

- You measure angles with a **protractor.**

Notice there are two scales. Be careful which 0 you start at.



This point is 0

This point is 0.

This point goes at the vertex of the angle

Vocabulary

- **Vertex-вершина**
- **Ray-луч**
- **Acute angle-острый угол**
- **Right angle-прямой угол**
- **Obtuse angle-тупой угол**
- **Straight angle-развернутый угол**
- **Equilateral triangle-равносторонний треугольник**
- **Isosceles triangle-равнобедренный треугольник**
- **Right triangle-прямоугольный треугольник**
- **Scalene triangle-разносторонний треугольник**
- **Interior angles-внутренние углы**
- **Protractor-транспортир**

- **Thank you for your attention!**