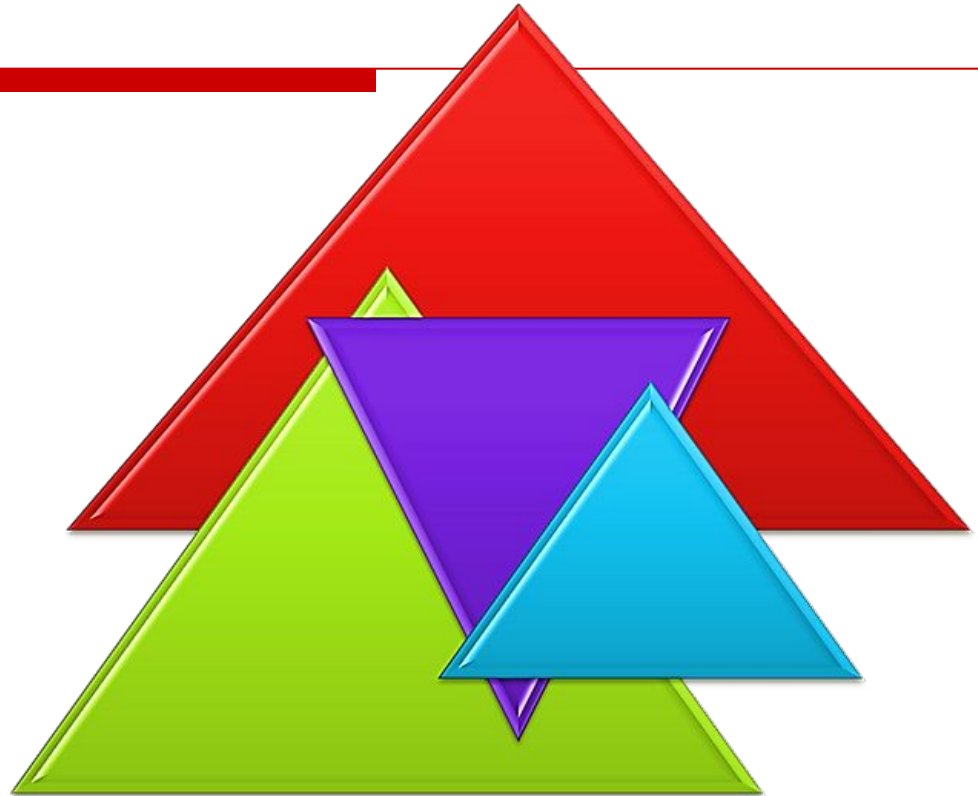


Angles and Triangles

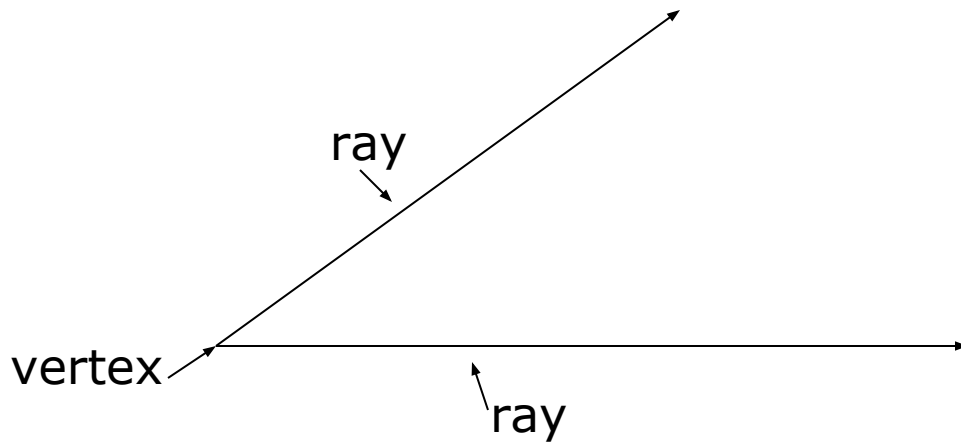


Presentation plan

- ▲ 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**

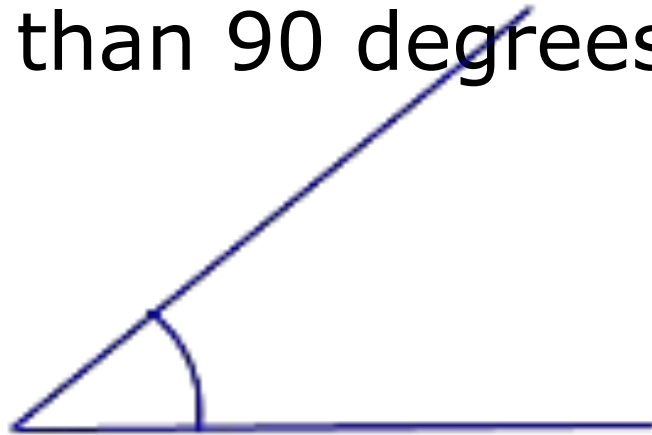


vertex—point common to two rays of a triangle or two sides of a polygon

ray—has one endpoint and goes infinitely in one direction

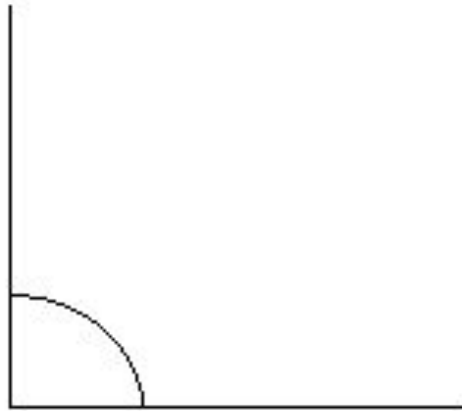
Types of Angles

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



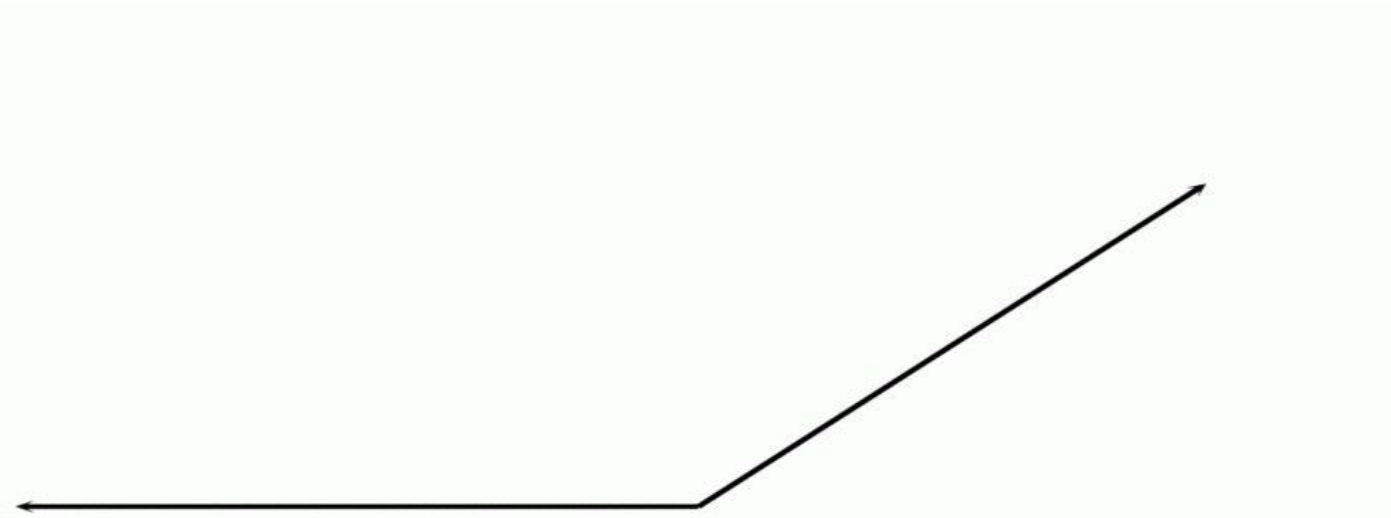
Types of Angles

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



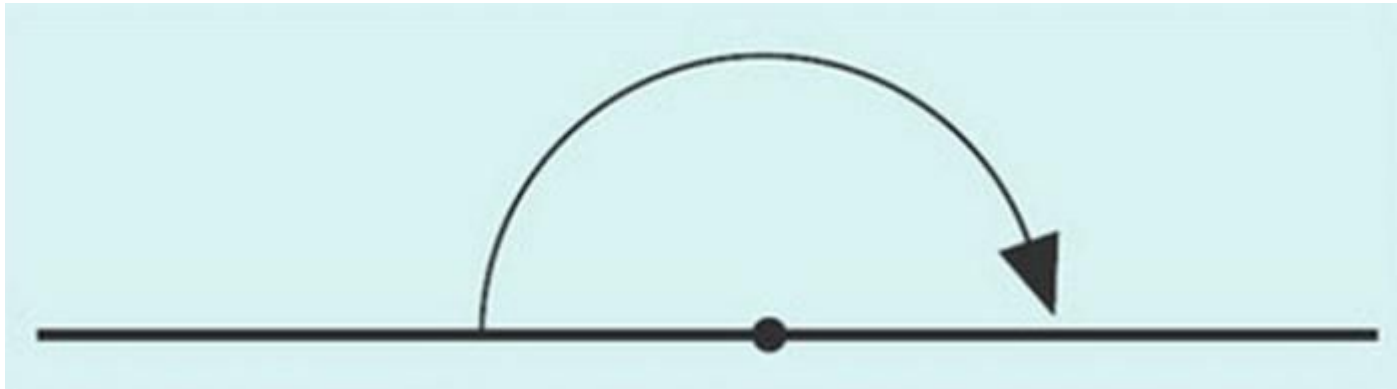
Types of Angles

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



Straight Angle

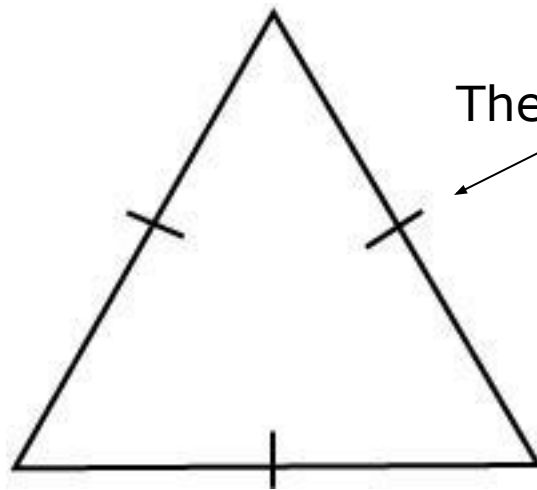
- **Straight angle:** A line that goes infinitely in both directions and measures 180 degrees



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

Types of Triangles

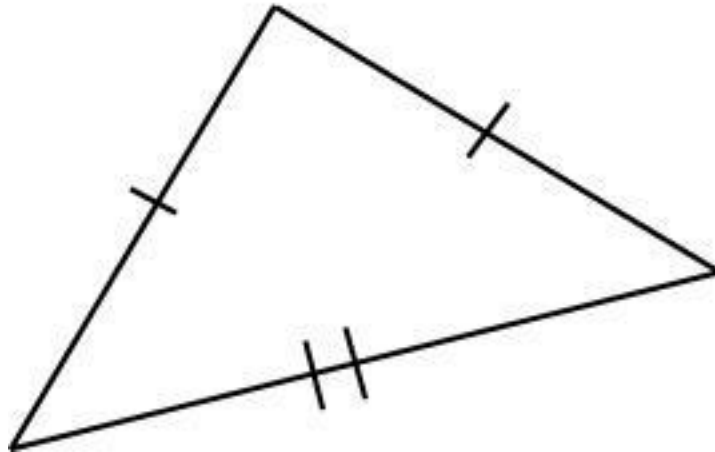
- **Equilateral triangle:** A triangle with three congruent (equal) sides and three equal angles



These marks indicate equality.

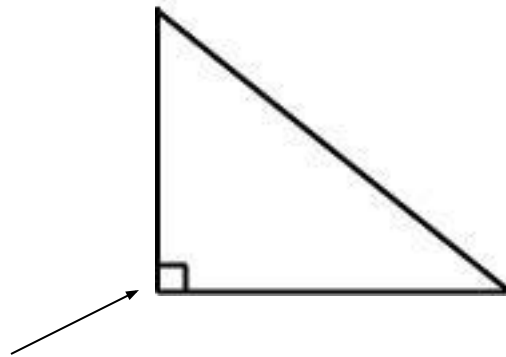
Types of Triangles

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



Types of Triangles

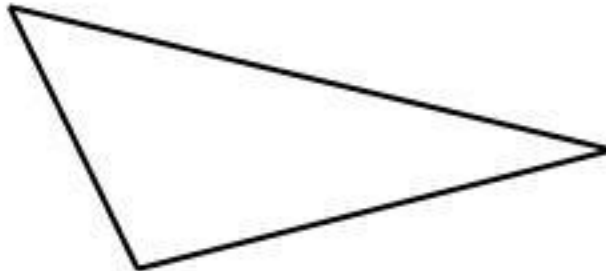
- **Right triangle:** Has only one right angle (90 degrees)



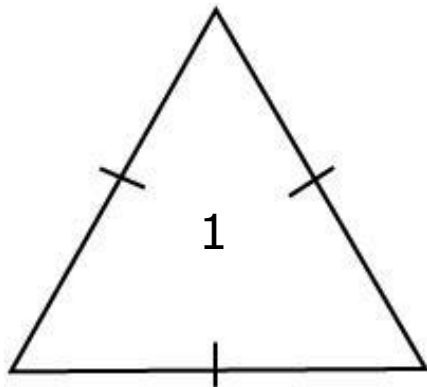
This box indicates a right angle or a 90-degree angle.

Types of Triangles

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

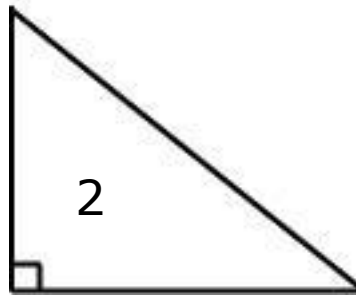


Types of Triangles

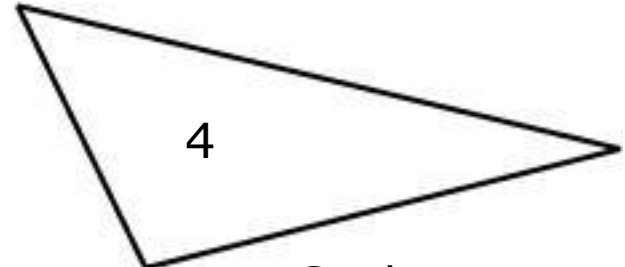


Equilateral

Right

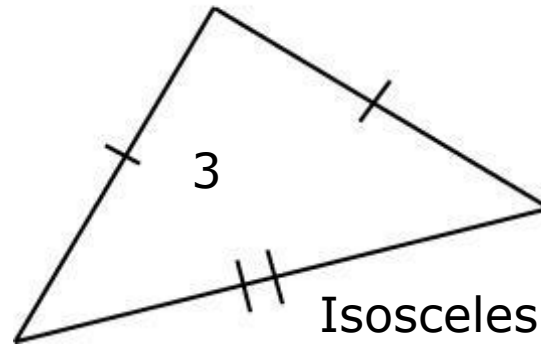


2



4

Scalene



3

Isosceles



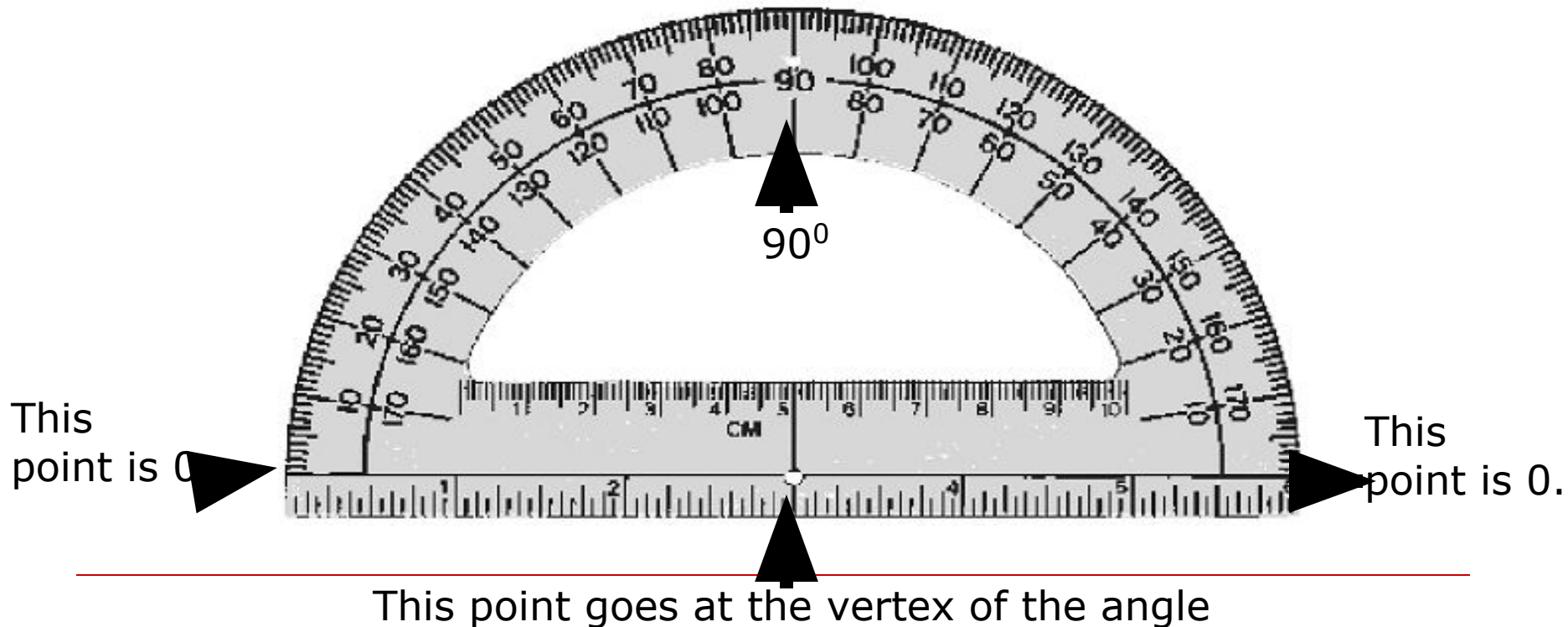
Interior Angles

- **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.



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!**
