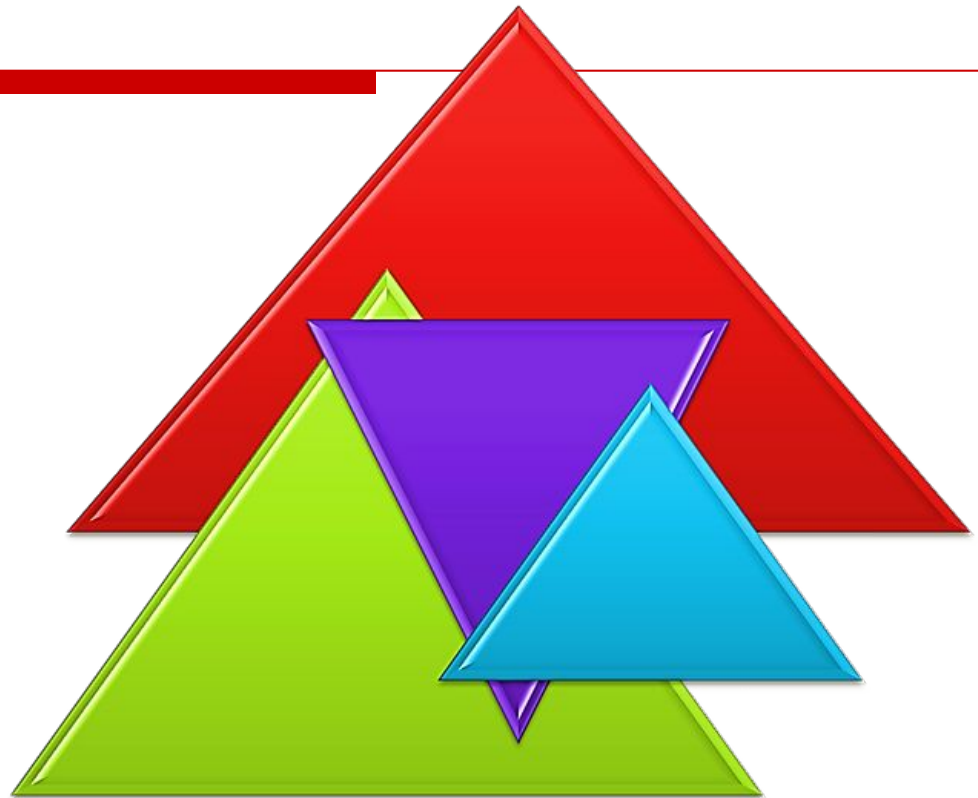


# Angles and Triangles



# Presentation plan

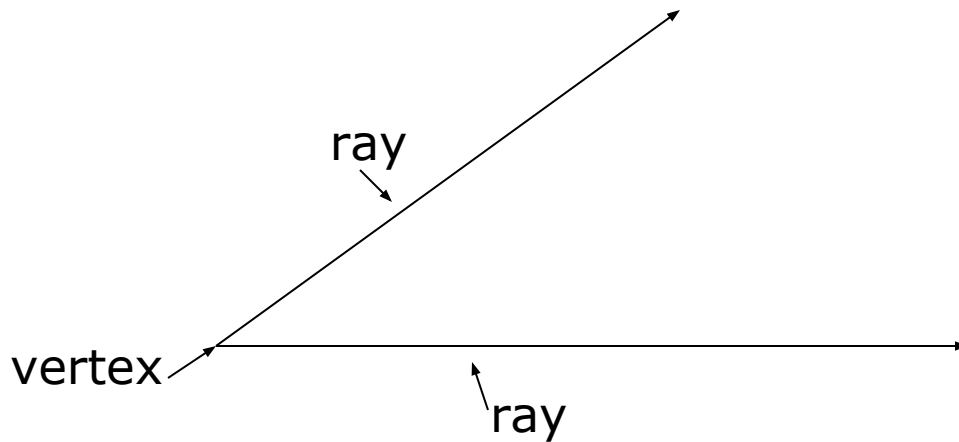
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- ▲ Angles
- ▲ Types of Angles
- ▲ Straight Angle
- ▲ Types of Triangles
- ▲ Interior Angles
- ▲ Measuring Angles

# Angles

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



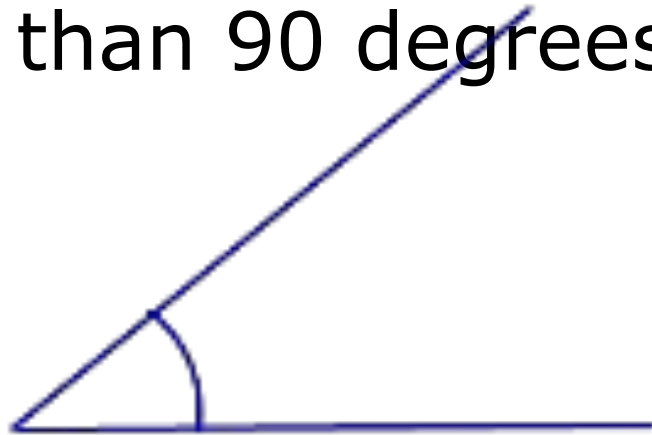
**vertex**—point common to two rays of a triangle or two sides of a polygon

**ray**—has one endpoint and goes infinitely in one direction

# Types of Angles

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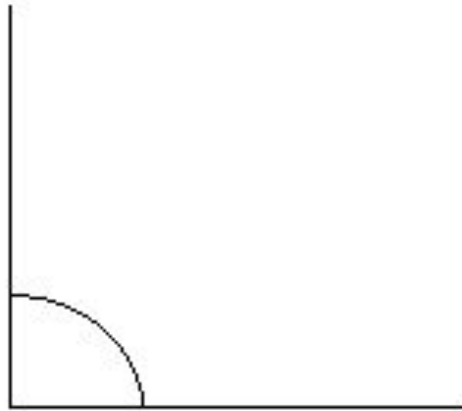
- **Acute angle:** An angle whose measure is greater than zero degrees and less than 90 degrees



# Types of Angles

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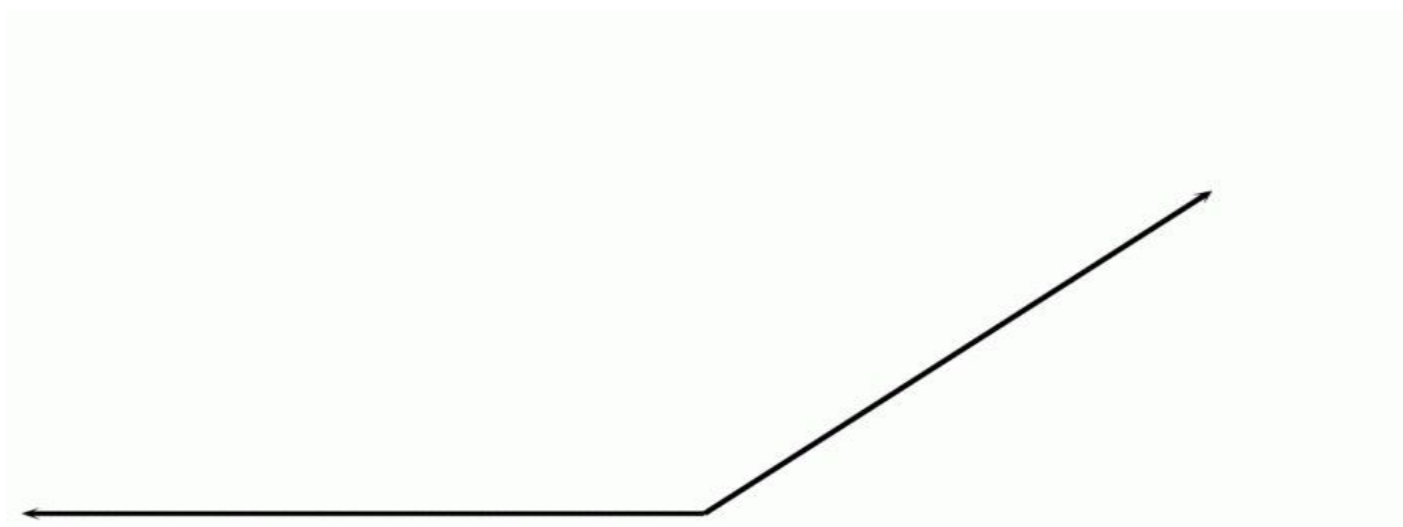
- **Right angle:** Angle that measures 90 degrees



# Types of Angles

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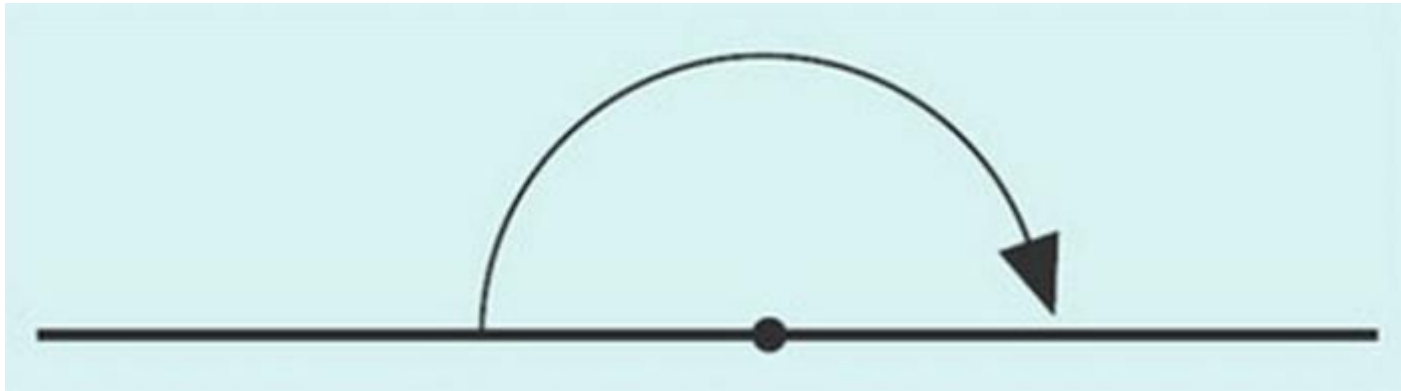
- **Obtuse angle:** One angle measures greater than 90 degrees and less than 180 degrees



# Straight Angle

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



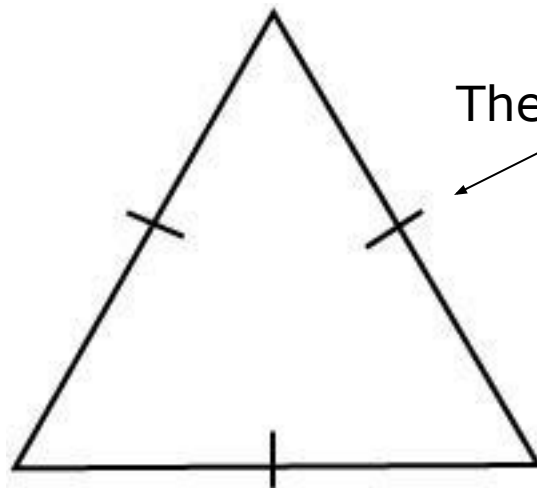
This is a ray. It only goes in one direction.

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# Types of Triangles

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



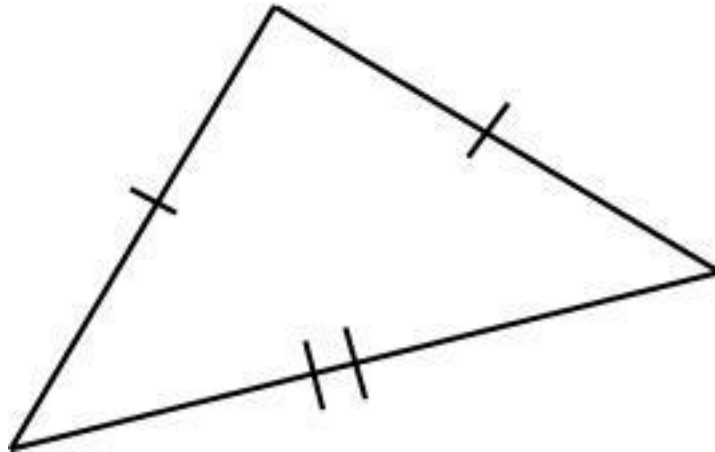
These marks indicate equality.



# Types of Triangles

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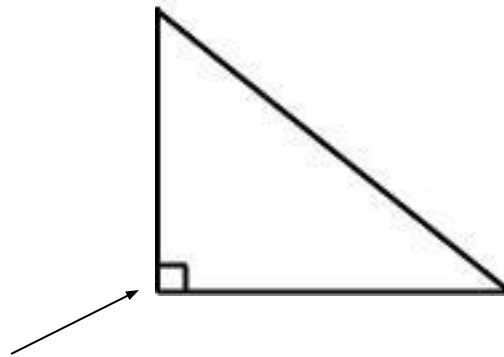
- **Isosceles triangle:** A triangle with at least two congruent (equal) sides



# Types of Triangles

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



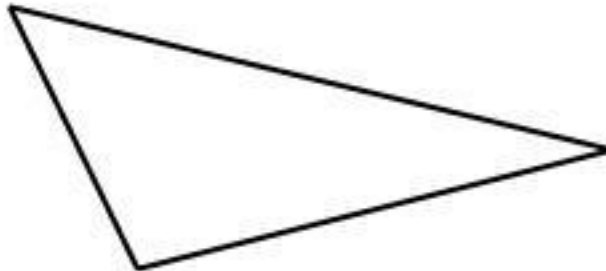
This box indicates a right angle or a 90-degree angle.

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# Types of Triangles

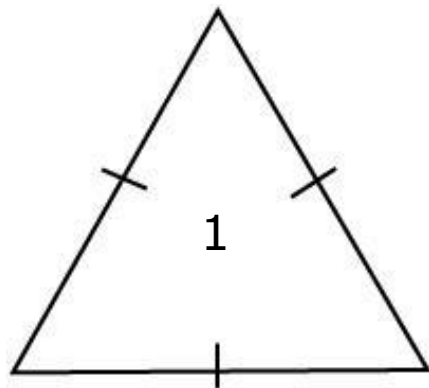
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- **Scalene triangle:** A triangle that has no congruent (equal) sides

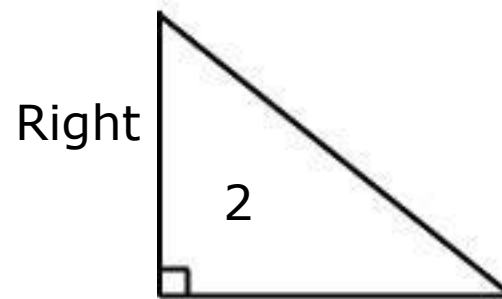


# Types of Triangles

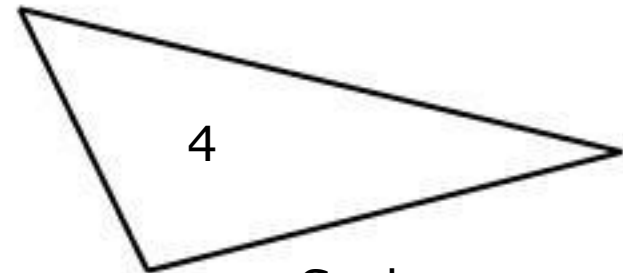
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Equilateral

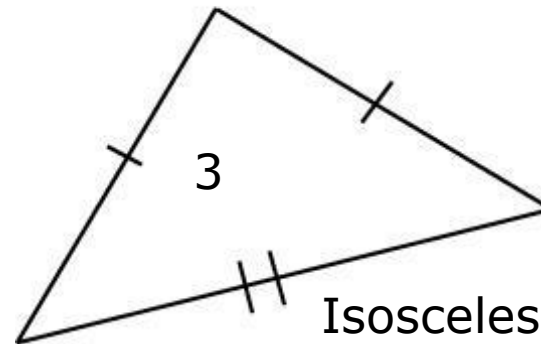


Right



4

Scalene



3

Isosceles

# Interior Angles

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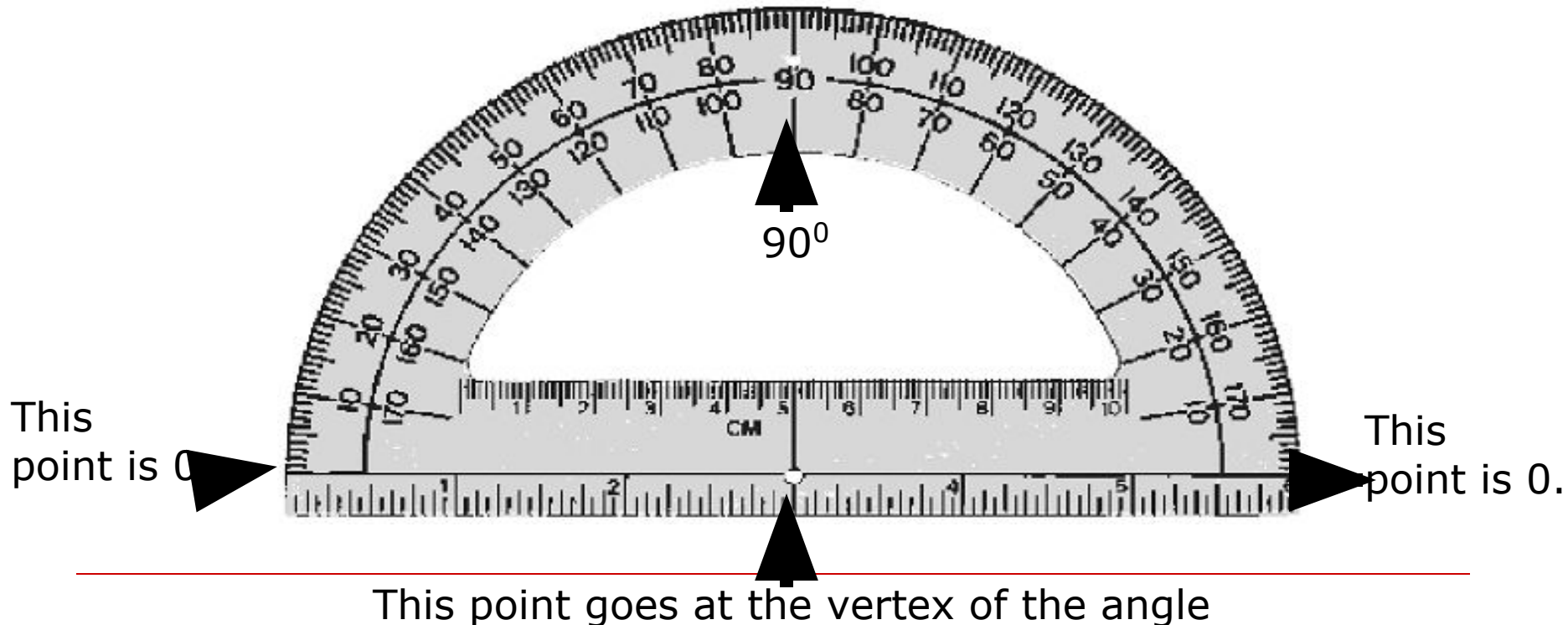
- **Interior angles:** An **interior angle** (or **internal angle**) is an angle formed by two sides of a simple polygon that share an endpoint
  - Interior angles of a triangle always equal 180 degrees.
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# Measuring Angles

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

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



# Vocabulary

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- **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
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☐ **Thank you for  
your attention!**

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