

## Chapter 1: Problems Involving Triangles

### Week 1:

#### Key Definitions

1. **Point:** A point is a basic unit of geometry that represents a location in space. It has no size, width, length, or depth—just position.
2. **Plane:** A plane is a flat, two-dimensional surface that extends infinitely in all directions.
3. **Line:** A line is a straight one-dimensional figure with no thickness that extends infinitely in both directions.
4. **Segment (Line Segment):** A segment or a line segment is a part of a line that has two endpoints. It is the straight path connecting two specific points.
5. **Triangle:** A triangle is a polygon with three sides and three vertices, formed by connecting three non-collinear points with line segments.
6. **Collinear Points:** Points that lie on the same straight line are called collinear. In the statement, the phrase “do not lie on the same line” means the points are non-collinear.

