
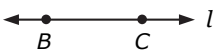


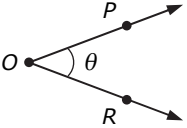
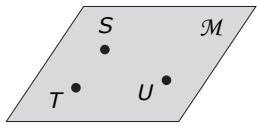
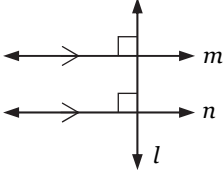
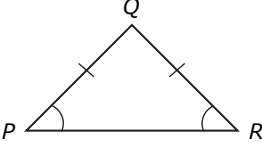
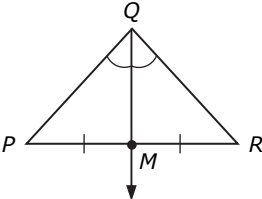


## LESSON 6 Basic Terms and Notations

### □ UNDERSTANDING BASIC TERMS AND NOTATIONS

Let's learn basic terms and notations. All terms and definitions can be found in Appendix B.

Definition	Example	Notation
A <b>point</b> is an exact location in space.		$A$
A <b>line</b> is a set of points extending endlessly in both directions.		line $l$ $\overleftrightarrow{BC}, \overleftrightarrow{CB}$
A <b>segment</b> is a part of a line with two endpoints.		$\overline{DE}, \overline{ED}$ $DE = \text{length of } \overline{DE}$
A <b>ray</b> is a part of a line with only one endpoint.		$\overrightarrow{FG}$
An <b>angle</b> is a figure formed by two rays, called the <b>sides</b> of the angle, sharing a common endpoint, called the <b>vertex</b> of the angle.		$\angle\theta, \angle O$ $\angle POR, \angle ROP$ $m\angle O = \text{measure of } \angle O$
A <b>plane</b> is a flat surface extending endlessly in all directions.		plane $\mathcal{M}$ , plane $STU$ , plane $TSU$ , ...
<b>Collinear points</b> are points that lie on a line. <b>Coplanar figures</b> are figures in the same plane.		$S, T$ , and $U$ are coplanar but not collinear.
<b>Parallel lines</b> are coplanar lines that do not intersect. <u>Arrowheads</u> indicate parallel lines.		$\parallel$ means parallel. $m \parallel n$
<b>Perpendicular lines</b> are lines that intersect at right angles. <u>Small boxes</u> indicate right angles.		$\perp$ means perpendicular. $l \perp m, l \perp n$
<b>Congruent segments</b> are segments with the same length. <u>Small segments</u> called hash marks indicate congruent segments.		$\cong$ means congruent. $\overline{PQ} \cong \overline{QR}$
<b>Congruent angles</b> are angles with the same measure. <u>Arcs</u> indicate congruent angles.		$\angle P \cong \angle R$
A <b>segment bisector</b> is a point, line, segment, ray, or plane that divides a segment into two congruent segments. A <b>midpoint</b> is a point that bisects a segment.		$\overline{PM} \cong \overline{MR}$ $\overrightarrow{QM}$ bisects $\overline{PR}$ . $M$ is the midpoint of $\overline{PR}$ .
An <b>angle bisector</b> is a ray or segment that divides an angle into two congruent angles.		$\angle PQM \cong \angle RQM$ $\overrightarrow{QM}$ bisects $\angle PQR$ .