3.1 Lines and Angles

Goals:

- Identify relationships between lines.
- Identify angles formed by transversals.

Vocabulary:

Parallel Lines - two lines that are coplanar and do not intersect

Skew Lines - two lines that are not coplanar and do not intersect

Parallel Planes – two planes that do not intersect

Transversal – a line that intersects two or more coplanar lines at different points

Corresponding Angles - two angles that occupy corresponding positions

Alternate Exterior Angles – two angles that lie outside the two lines on opposite sides of the transversal

Alternate Interior Angles – two angles that lie between the two lines on opposite sides of the transversal

Consecutive Interior Angles – two angles that lie between the two lines on the same side of the transversal

Same Side Interior Angles - another name for consecutive interior angles





POSTULATE 13: PARALLEL POSTULATE

If there is a line and a point not on the line, then there is exactly one line through the point parallel to the given line. There is exactly one line through P parallel to I. **POSTULATE 14: PERPENDICULAR POSTULATE** If there is a line and a point not on the line, then there is exactly one line through the point perpendicular to the given There is exactly one line through P perpendicular to I.

Identifying Angle Relationships Example 2



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