

HW pgs 176 21-37 odd
177 38-45

3.1 Parallel Lines and Transversals

Objective: To identify relationships between 2 lines or two planes

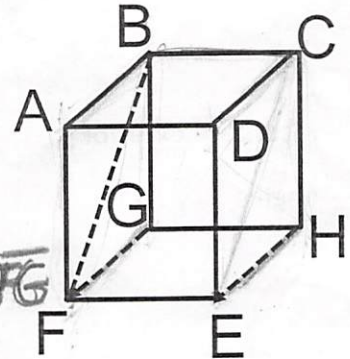
Name angle pairs formed by parallel lines and transversals

Parallel Lines 2 coplanar lines that never intersect
EX: $\overline{AB} \parallel \overline{DC}$

Skew Lines 2 non coplanar lines that never intersect
EX: \overline{AB} skew to \overline{CH}

Parallel Planes 2 planes that never intersect
EX: $\overline{AFB} \parallel \overline{DGC}$

Identify the following using the cube



1. all segments skew to BC $\overline{DE}, \overline{AF}, \overline{HE}, \overline{FG}$
2. segments parallel to EH $\overline{FG}, \overline{DC}, \overline{AB}$
3. all planes parallel to DCH \overline{ABG}

<u>Angle Names</u>	<u>Description</u>	<u>Angles</u>
Interior angles	lie in between the 2 lines	$\angle 4, \angle 3,$ $\angle 5, \angle 6$
Exterior angles	lie in outside regions of lines	$\angle 1, \angle 2$ $\angle 7, \angle 8$
Consecutive Interior Angles (same side interior)	interior \angle 's on same side of t	$\angle 4 \cong \angle 5$ $\angle 3 \cong \angle 6$
Alternate interior angles	interior \angle 's on opposite side of t	$\angle 3 \cong \angle 5$ $\angle 4 \cong \angle 6$
Alternate exterior angles	exterior \angle 's on opposite sides of t (TRANSVERSAL)	$\angle 2 \cong \angle 8$ $\angle 1 \cong \angle 7$
Corresponding angles	lie on same side of transversal and on same side of lines (both above or both below)	$\angle 3 \cong \angle 7$ $\angle 4 \cong \angle 8$ $\angle 5 \cong \angle 1$ $\angle 6 \cong \angle 2$

