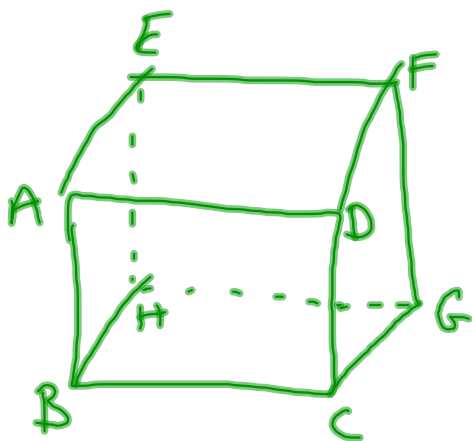


3.1 Lines + Angles

Line definitions

1. Parallel (\parallel): 2 lines that never intersect, and are coplanar
2. Perpendicular (\perp): 2 lines that intersect at 90° angles.
3. skew: non coplanar, non parallel, nonintersecting lines.
4. parallel Planes: planes that never intersect.

Ex:



$$\overline{AC} \parallel \overline{DF}$$

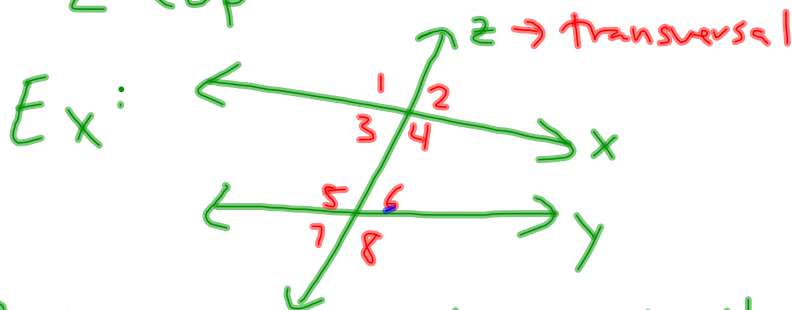
$$\overline{AB} \perp \overline{BC}$$

\overline{AB} is skew to \overline{CG}

Plane BAD \parallel Plane EFG

Angle Definitions

1. Transversal line that intersects 2 coplanar lines at 2 different points



2. Corresponding angles: angles that lie on the same side of the transversal and same side of x & y .

Ex: $\angle 1 + \angle 5$, $\angle 2 + \angle 6$, $\angle 4 + \angle 8$, $\angle 3 + \angle 7$

3. Alternate Interior angles: non adjacent angles on opposite sides of the transversal and on the interior of x & y .

Ex: $\angle 3 + \angle 6$, $\angle 4 + \angle 5$

4. Alternate Exterior Angles:

non adjacent, on opposite sides of transversal, and on the exterior of x & y .

Ex: $\angle 1 + \angle 8$, $\angle 2 + \angle 7$

5. Consecutive interior Angles (Same side-int.)

lie on same side of transversal, and are on the interior of x & y .

Ex: $\angle 4 + \angle 6$, $\angle 3 + \angle 5$

HW: p. 148
2-40 evens.