## **Notes 7.1 Identify pairs of Lines and Angles**

Parallel Lines: Are coplanar

Do not intersect

Lines that are parallel to  $\overrightarrow{FG}$  are:  $\overrightarrow{CD}$ ,  $\overrightarrow{EH}$ ,  $\overrightarrow{AB}$ 

Intersecting lines: Are coplanar

Do intersect

Lines that intersect to  $\overrightarrow{FG}$  are:  $\overrightarrow{CG}, \overrightarrow{GH}, \overrightarrow{DF}, \overrightarrow{EF}$ 

**Skew lines:** Are not coplanar

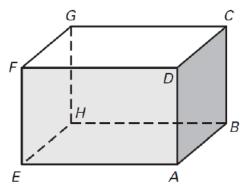
Do not intersect

Lines that are skew to  $\overrightarrow{FG}$  are:  $\overrightarrow{BH}$ ,  $\overrightarrow{EA}$ ,  $\overrightarrow{AD}$ ,  $\overrightarrow{CB}$ 

Parallel Planes: Opposite sides of box

Do not intersect

Plane that is parallel to plane FGH is: plane DCB



## **Notes 7.1 Identify pairs of Lines and Angles**

**Transversal:** A line that crosses two other lines

**Corresponding Angles:** Same side of transversal

Not adjacent

One interior, one exterior

Paired corresponding angles are:  $\angle 1$  and  $\angle 5$ 

 $\angle 2$  and  $\angle 6$  $\angle 3$  and  $\angle 7$  $\angle 4$  and  $\angle 8$ 

Alternate Exterior Angles: opposite sides of transversal

Not adjacent Both exterior

Paired alternate exterior angles are:  $\angle 1$  and  $\angle 8$ 

 $\angle 2$  and  $\angle 7$ 

Alternate Interior Angles: opposite sides of transversal

Not adjacent Both interior

Paired alternate interior angles are:  $\angle 3$  and  $\angle 6$ 

 $\angle 4$  and  $\angle 5$ 

Same-Side Interior Angles: Same side of transversal

Or Not adjacent **Consecutive Interior Angles:** Both interior

Paired same-side interior angles are:  $\angle 3$  and  $\angle 5$ 

or ∠4 *and* ∠6

Paired consecutive interior angles are:

