

# Parallel, Perpendicular, and Skew Definitions

## Parallel Lines:

are lines that lie in the same plane or flat surface and do not intersect

$\overleftrightarrow{EC} \parallel \overleftrightarrow{AD}$  are parallel lines in the figure below:

## Perpendicular Lines:

are lines that lie in the same plane that intersect and form 90 degree angles

$\overleftrightarrow{CD} \perp \overleftrightarrow{DF}$  are perpendicular lines in figure below:

## Skew lines:

are lines in different planes that do not intersect but are not parallel

$\overleftrightarrow{AB}$  and  $\overleftrightarrow{FG}$  are skew lines in the figure below:

## Parallel Planes:

are planes that will never intersect

Plane  $AECD$  is parallel to Plane  $BHGF$  in the figure below:

## Perpendicular Planes:

are planes that intersect at right angles or 90 degrees

Plane  $AEHG$  is perpendicular to Plane  $EHGC$  in the figure below:

