

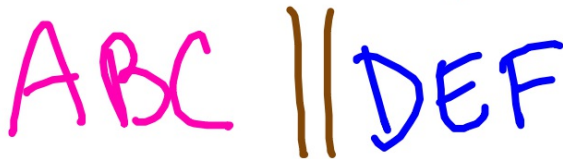


11.1 EQ: **How do you find parallel and perpendicular lines?**

**Line:** A straight set of points with no end 

**Segment:** Part of a line that ends 

**Parallel to Planes:** Never intersect the plane



**Parallel Lines:** Never intersect



**Perpendicular Lines:** Intersect at a right angle



**Example 1:**

a. Name two planes that intersect.

ADC and EAB

b. Name a line in plane FEH.

$\overleftrightarrow{EH}$   $\overleftrightarrow{GH}$   $\overleftrightarrow{EG}$

c. Name a plane that contains  $\overline{FB}$ .

GCB and EAB

d. Name two parallel lines and label it in the diagram.

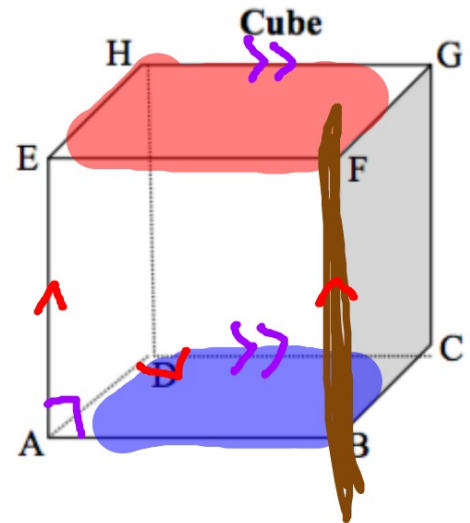
$\overleftrightarrow{AE} \parallel \overleftrightarrow{FB}$   $\overleftrightarrow{GH} \parallel \overleftrightarrow{CD}$

e. Name two segments that are parallel to plane EHD.

$\overline{GC}$   $\overline{GF}$   $\overline{FB}$   $\overline{BC}$

f. Name two segments that are perpendicular to each other.

$\overline{EA} \perp \overline{BA}$   $\overline{DA} \perp \overline{DC}$



**Example 2:**

a. Name all segments that are parallel to  $\overline{RS}$ .

$\overline{PQ}, \overline{XW}, \overline{ZY}$

b. Name all segments that are perpendicular to  $\overline{RS}$ .

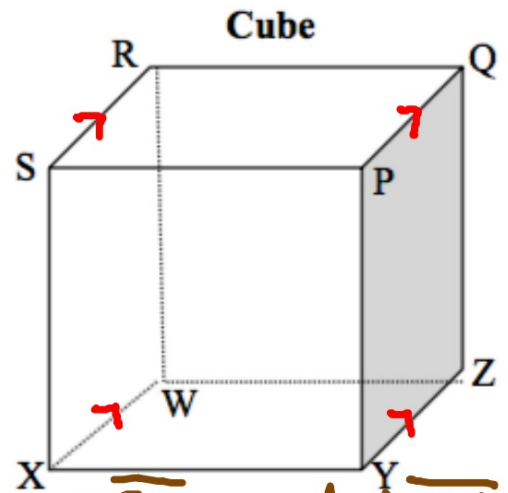
$\overline{SX}, \overline{RW}, \overline{RQ}, \overline{SP}$

c. Name all segments that parallel to plane QZY.

$\overline{SX}, \overline{RW}, \overline{RS}, \overline{XW}$

d. Name all segments that are perpendicular to plane QZY.

$\overline{QR}, \overline{XY}, \overline{ZW}, \overline{PS}$



$\neq \overline{SR}$  and  $\overline{XY}$   
are skew.

Summary: