

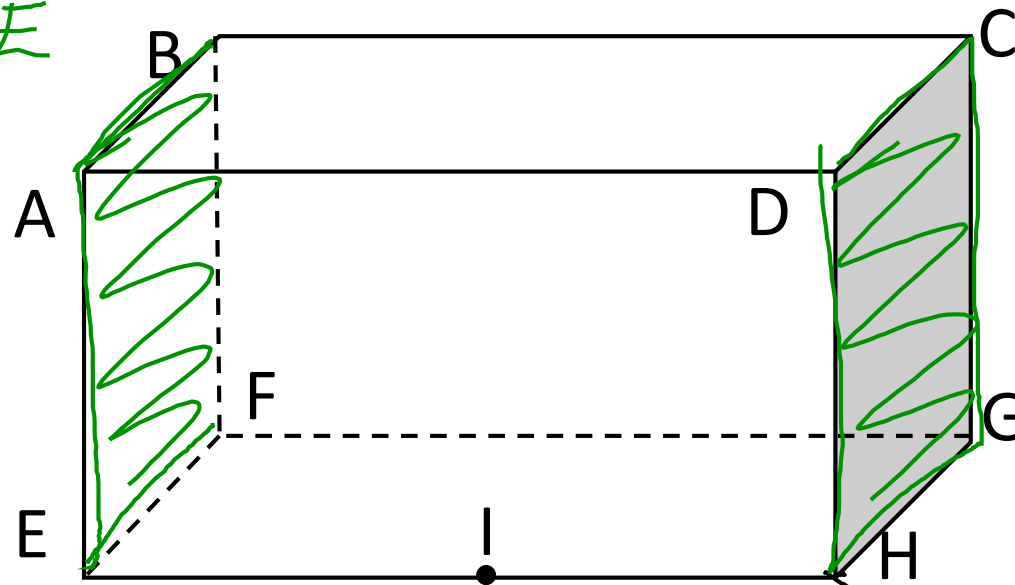
Bell Work

Student Journal p. 66 letter a and #4.

Sketch the figure and answer the questions.

- a. Which line(s) is/are parallel to \overleftrightarrow{GH} and contains point F? \overleftrightarrow{EF}
- b. Which line(s) is/are skew to \overleftrightarrow{GH} and contain point F? \overleftrightarrow{BF}
- c. Which line(s) is/are perpendicular to \overleftrightarrow{GH} and contain point F? \overleftrightarrow{GF}
- d. Which plane(s) is/are parallel to plane GHD and contain point F?

plane BAE



$\overleftrightarrow{DE} \parallel \overleftrightarrow{HI} \parallel \overleftrightarrow{BC}$

$\overleftrightarrow{AF} \parallel \overleftrightarrow{BH}$

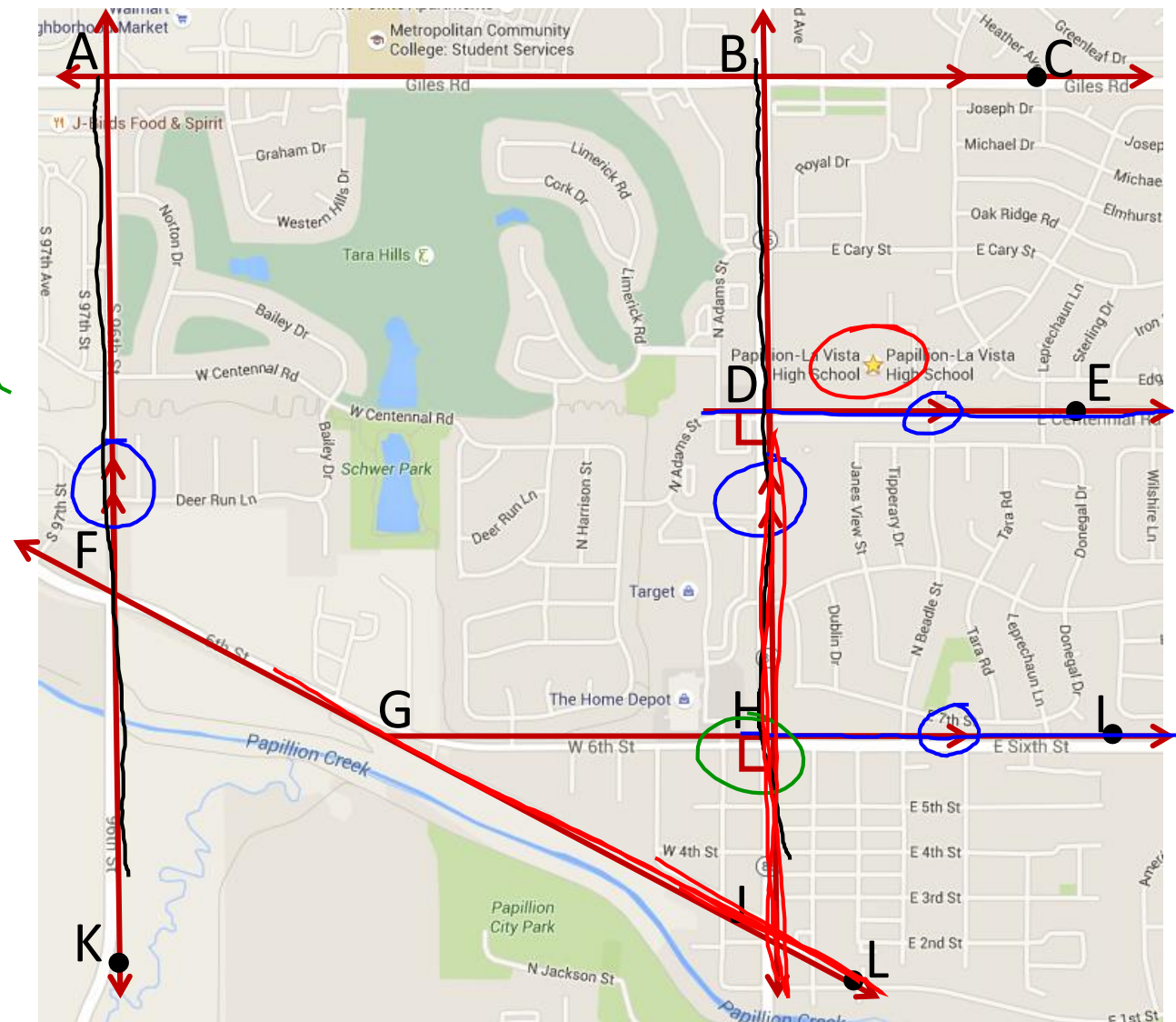
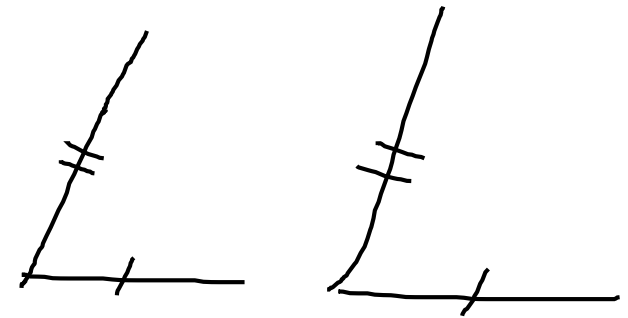
$\overleftrightarrow{GI} \perp \overleftrightarrow{DJ}$

perpendicular to

a. Name a pair of parallel lines.

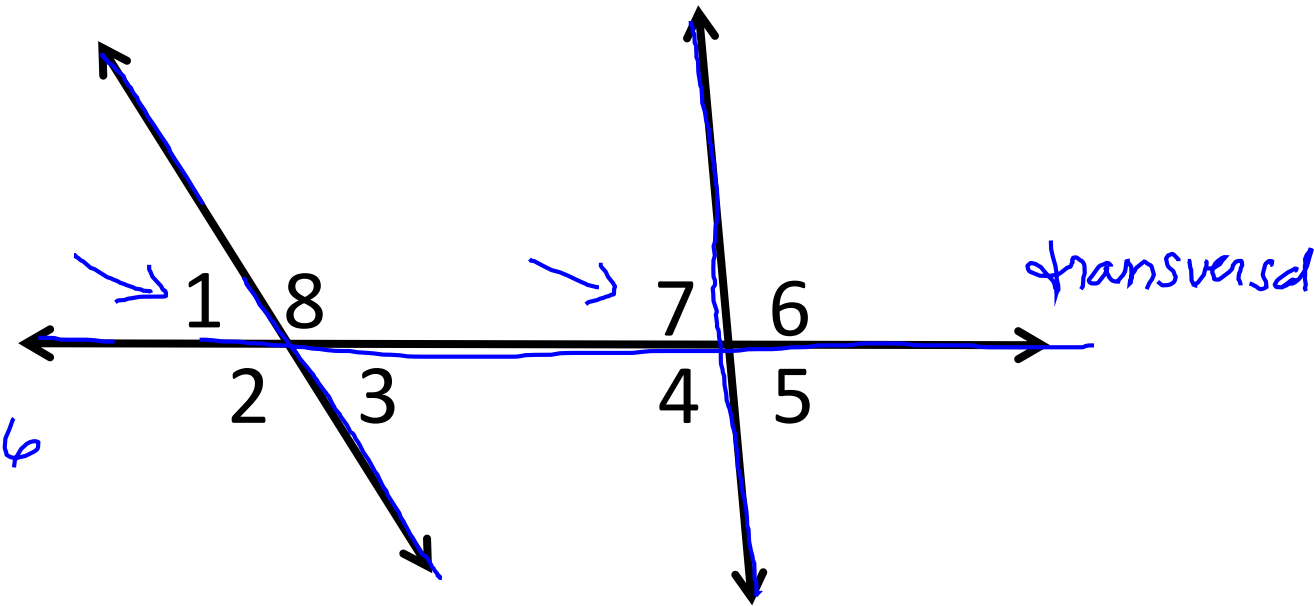
b. Name a pair of perpendicular lines.

c. Is $\overleftrightarrow{GJ} \perp \overleftrightarrow{DH}$?



Identify all pairs of angles of the given type.

- a. Consecutive interior
Same Side of transversal inside
 $\angle 3 + \angle 4$ $\angle 8 + \angle 7$
- b. *Opposite* Alternate exterior *outside*
 $\angle 1 + \angle 5$ $\angle 2 + \angle 6$
- c. Corresponding
 $\angle 1 + \angle 7$, $\angle 2 + \angle 4$, $\angle 8 + \angle 6$
 $\angle 3 + \angle 5$
- d. Alternate interior
 $\angle 8 + \angle 4$, $\angle 3 + \angle 7$



In Class - Lesson 3.1 p. 129: 1, 2-20 even, 24-31

Homework –

Add the **Parallel Postulate** and the **Perpendicular Postulate** (p. 127) to your notes.

Write theorems 3.1-3.2 in middle squares of blue foldable (p. 132).

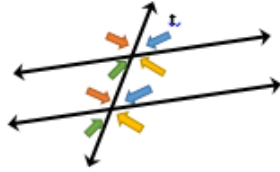
Notes Check

- Green **Types of Lines** foldable complete
- Blue **Types of Angles** all squares complete
- Parallel and Perpendicular Postulate in your notebook

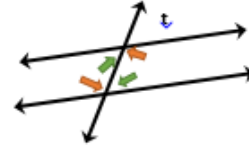
Characteristics	What You Draw	What You Say	What You Write
Parallel lines never cross and stay the same distance apart. They are coplanar. They have 0 points in common.		Line AB is parallel to line CD or line l is parallel to line j	$\overline{AB} \parallel \overline{CD}$ or line l \parallel line j
Intersecting lines pass through the same point. They have one point in common.		Lines HG and EF intersect at point I.	\overline{HG} intersects \overline{EF} . (There is no symbol for intersection of lines.)
Perpendicular lines intersect at right angles. They have one point in common.		Line LM is perpendicular to line JK.	$\overline{LM} \perp \overline{JK}$.
Coincident lines are the same line. They have an infinite number of points in common.		Line NO and line OP are coincident lines.	(There is no symbol for coincident lines.)
Skew lines are lines that are non-coplanar and never intersect. They have 0 points in common.		Line TS and line QR are skew lines.	\overline{TS} and \overline{QR} are skew. (There is no symbol for skew lines.)

Two angles are corresponding angles when they have corresponding positions. 	Two angles are alternate interior angles when they lie between the two lines and on opposite sides of the transversal.
If two parallel lines are cut by a transversal, corresponding angles are congruent . 	If two parallel lines are cut by a transversal, alternate interior angles are congruent .
If two parallel lines are cut by a transversal, alternate exterior angles are congruent . 	If two parallel lines are cut by a transversal, consecutive interior angles are supplementary .
Two angles are alternate exterior angles when they lie outside the two lines and on opposite sides of the transversal. 	Two angles are consecutive interior angles when they lie between the two lines and on same side of the transversal.

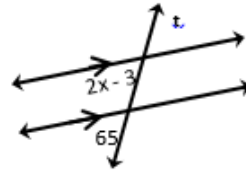
Two angles are **corresponding angles** when they have corresponding positions.



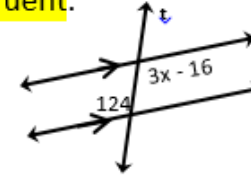
Two angles are **alternate interior angles** when they lie between the two lines and on opposite sides of the transversal.



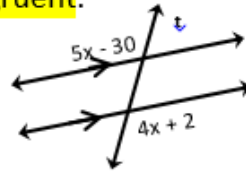
If two parallel lines are cut by a transversal, **corresponding angles are congruent**.



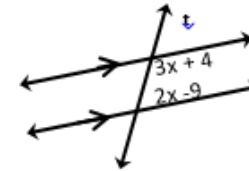
If two parallel lines are cut by a transversal, **alternate interior angles are congruent**.



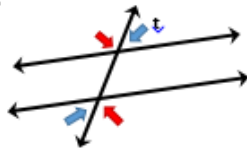
If two parallel lines are cut by a transversal, **alternate exterior angles are congruent**.



If two parallel lines are cut by a transversal, **consecutive interior angles are supplementary**.



Two angles are **alternate exterior angles** when they lie outside the two lines and on opposite sides of the transversal.



Two angles are **consecutive interior angles** when they lie between the two lines and on same side of the transversal.

