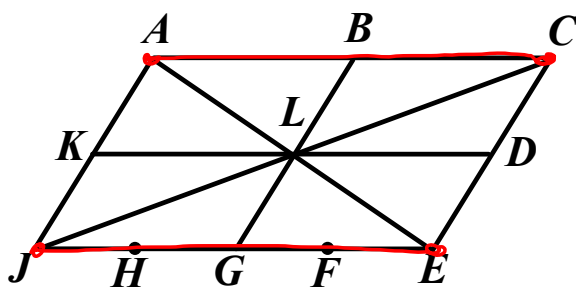


Term	Definition	Symbol
Intersection <i>Overlap And both at same time</i>	The point or collection of points where two geometric "parts" <u>cross touch</u> . These "parts" include points, segments, rays, lines, and planes, among other things.	
Union <i>all together OR</i>	The geometric shapes formed by <u>combining</u> two or more geometric parts <u>together</u> .	



$$1.) \overset{\text{intersect}}{\overline{CD}} \cap \overline{DE} = D$$

$$2.) \overset{\text{Union}}{\overline{AK}} \cup \overline{KJ} = \overline{AJ}$$

all together

$$3.) \overline{JF} \cap \overline{HE} = \overline{HF}$$

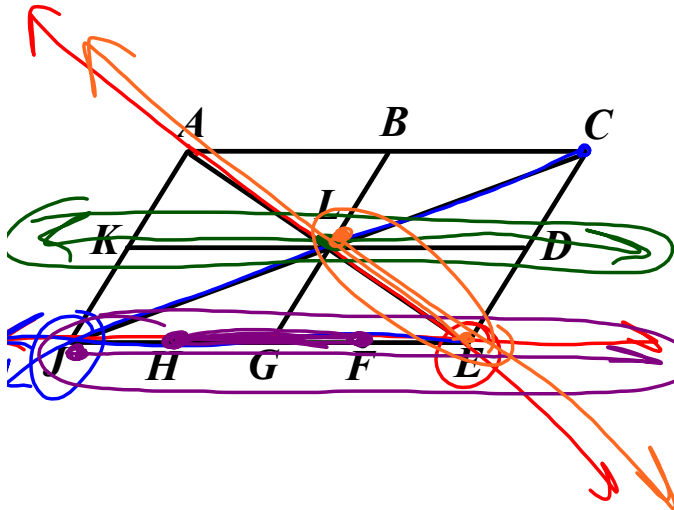
$$4.) \overline{BG} \cap \overline{KD} = L$$

intersect

$$5.) \overline{AC} \cap \overline{JE} = \emptyset$$

intersect

*empty set
No overlap
No solution*



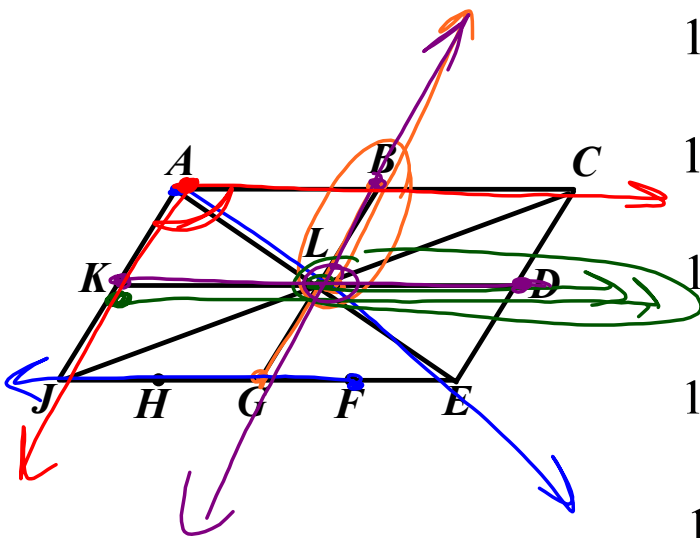
6.) $\overrightarrow{AL} \cap \overrightarrow{JG} = E$

7.) $\overrightarrow{CL} \cap \overrightarrow{EG} = J$

8.) $\overrightarrow{HF} \cup \overrightarrow{JE} = \overrightarrow{JE}$

9.) $\overrightarrow{LK} \cup \overrightarrow{LD} = \overrightarrow{KD}$

10.) $\overrightarrow{EA} \cap \overrightarrow{LE} = \overline{LE}$



11.) $\overrightarrow{BG} \cap \overrightarrow{LB} = \overline{LB}$

12.) $\overrightarrow{AL} \cap \overrightarrow{FJ} = \emptyset$
Overlap

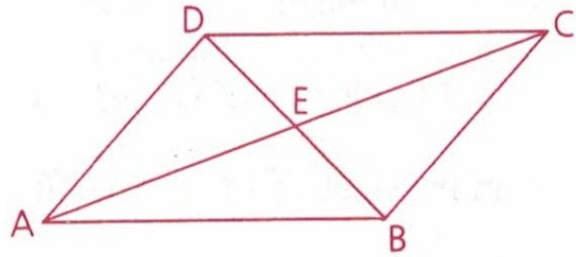
13.) $\overrightarrow{LD} \cap \overrightarrow{KD} = \overline{LD}$

14.) $\overrightarrow{KD} \cap \overrightarrow{BG} = L$

15.) $\overrightarrow{AC} \cup \overrightarrow{AJ} = \angle JAC$
Union angle
Vertex Letter in middle

Homework: *Key*

- 1 a $\overline{AB} \cap \overline{BC} = \overleftrightarrow{B}$
 b $\overrightarrow{EC} \cup \overrightarrow{EA} = \overline{AC}$
 c $\overleftrightarrow{AC} \cap \overleftrightarrow{DB} = \overline{E}$
 d $\overline{DC} \cap \overline{AB} = \overline{\emptyset}$
 e $\overrightarrow{AC} \cap \overrightarrow{EC} = \overline{EC}$



2

- 2 a $\overrightarrow{EC} \cup \overrightarrow{FA} = \overleftrightarrow{AC} \text{ or } \overleftrightarrow{EF}$
 b $\overrightarrow{EC} \cap \overrightarrow{FA} = \overline{EF}$
 c $\overleftrightarrow{AC} \cap \overleftrightarrow{DR} = \overline{A}$

