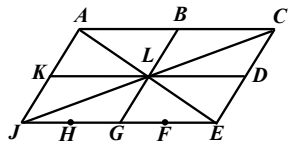


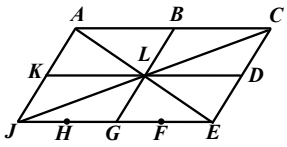
1.) $\overline{CD} \cap \overline{DE} =$ D

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

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

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

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



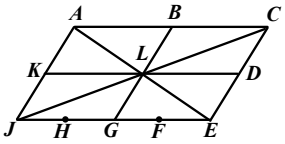
6.) $\overrightarrow{AL} \cap \overrightarrow{JG} =$ E

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

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

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

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



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

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

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

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

15.) $\overrightarrow{AC} \cup \overrightarrow{AJ} =$

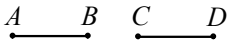
1.2- Points, Lines, and Planes

Lesson Objectives

- Draw and measure segments
- Use the segment addition postulate
- Apply concept of congruence to solve problems

Congruent Segments

Line segments that have the same length are called ***congruent segments***. You can express this in 3 different ways:



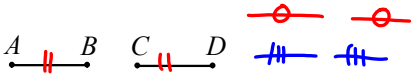
1. "The length of AB is equal to the length of CD"

$AB = CD$

2. "Segment AB is congruent to segment CD."

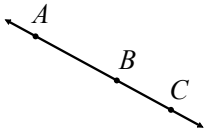
$\overline{AB} \cong \overline{CD}$

3. You can use "tick marks" to show congruence.

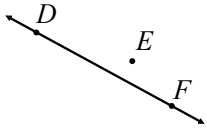


Betweenness of Points

When 3 points are collinear, you can say that one point is ***between*** the other 2.



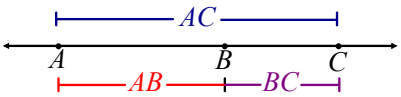
B is ***between*** points A and C.



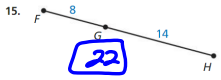
E is ***not between*** points D and F.

Segment Addition Postulate (2 parts)

- If B is between points A and C, then AB + BC = AC.
- If AB + BC = AC, then B is between points A and C.



In Exercises 15–22, find *FH*. *(See Example 3.)*

15. 

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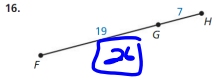
16. 

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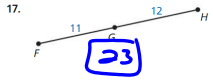
17. 

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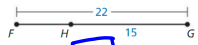
20. 

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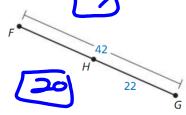
21. 

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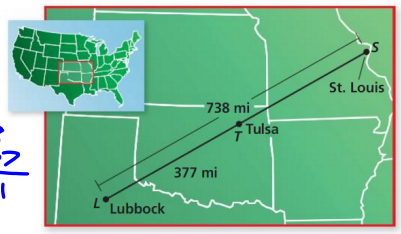
EXAMPLE **Using the Segment Addition Postulate**

The cities shown on the map lie approximately in a straight line. Find the distance from Tulsa, Oklahoma, to St. Louis, Missouri.



738
− 377
361

Homework

1.2 p.16 #18,19,22,25,26,28,29,31,36