

**LESSON**

**1-2**

**Practice B**

**Measuring and Constructing Segments**

Draw your answer in the space provided.

1. Use a compass and straightedge to construct  $\overline{XY}$  congruent to  $\overline{UV}$ .



Find the coordinate of each point.



2.  $D$  \_\_\_\_\_                      3.  $C$  \_\_\_\_\_                      4.  $E$  \_\_\_\_\_

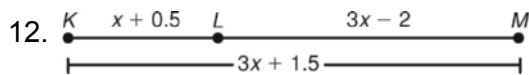
Find each length.

5.  $BE$  \_\_\_\_\_                      6.  $DB$  \_\_\_\_\_                      7.  $EC$  \_\_\_\_\_

For Exercises 8–11,  $H$  is between  $I$  and  $J$ .

8.  $HI = 3.9$  and  $HJ = 6.2$ . Find  $IJ$ . \_\_\_\_\_  
 9.  $JI = 25$  and  $IH = 13$ . Find  $HJ$ . \_\_\_\_\_  
 10.  $H$  is the midpoint of  $\overline{IJ}$ , and  $IH = 0.75$ . Find  $HJ$ . \_\_\_\_\_  
 11.  $H$  is the midpoint of  $\overline{IJ}$ , and  $IJ = 9.4$ . Find  $IH$ . \_\_\_\_\_

Find the measurements.



12. Find  $LM$ . \_\_\_\_\_
13. A pole-vaulter uses a 15-foot-long pole. She grips the pole so that the segment below her left hand is twice the length of the segment above her left hand. Her right hand grips the pole 1.5 feet above her left hand. How far up the pole is her right hand? \_\_\_\_\_

### Challenge

1. X, A, C
2. Sample answer:  $E$
3.  $\mathcal{P}$  and  $\mathcal{R}$
4. True; the lines intersect at point  $J$ .
- 5.

<b>Number of lines in a plane</b>	0	1	2	3	4
<b>Greatest number of regions determined</b>	1	2	4	7	11

6. Sample answer: The pattern is one of increasing differences.
7. 16 regions ( $16 - 11 = 5$ )
8. Answer: 5d. Drawings will vary.
9. 15

### Problem Solving

1. Point  $D$ ; E. Travis St. and Navarro St.
2. Point  $A$  does not lie on the line that contains  $\overline{BE}$ .
3. Sample answer:  $\overline{UV}$  intersects plane  $\mathcal{P}$ .
4. 0 times; if two lines intersect, then they intersect in exactly one point.
5. B
6. J
7. C

### Reading Strategies

1. A line segment is a specific portion of a line that begins and ends.
2. A line goes on forever in both directions, while a segment has endpoints.
3. A ray and a line segment are both parts of a line.
4. A line segment has 2 endpoints. A ray has 1 endpoint and extends forever in one direction.
5. point
6. segment
7. ray
8. endpoint
9. line
10. plane

## LESSON 1-2

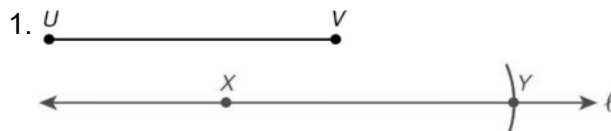
### Practice A

1. coordinate
2. distance
3. 7
4. 2
5. 0
6. 5
7. 1
8. 10
9. length



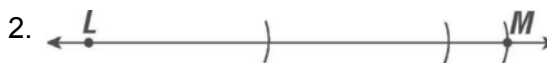
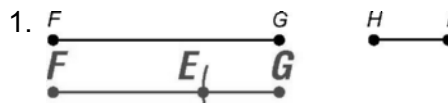
11. 4
12. 113 miles
13. 35 miles

### Practice B



2. 0
3. 2
4. -3.5
5. 0.5
6. 4
7. 5.5
8. 10.1
9. 12
10. 0.75
11. 4.7
12. 7
13. 11.5 ft

### Practice C



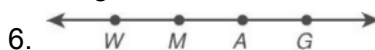
3. Sample answer:

$$|5 - (-3)| = |-3 - 5|$$

$$|8| = |-8|$$

$$8 = 8$$

4.  $0 < XY < 39$
5.  $DE$  and  $BC$  are lengths, not segments. Lengths can be equal. Segments can be congruent.  $DE = BC$ ;  $\overline{DE} \cong \overline{BC}$



7. 10