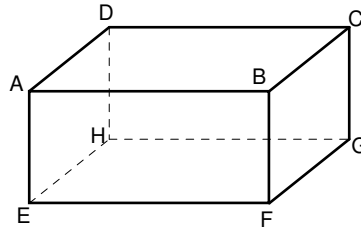


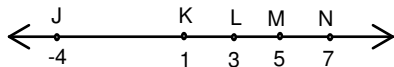
Ch 1  
Worksheet  
Points, Lines and Planes

1. Refer to the diagram:



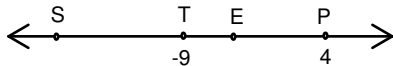
- a) Name 2 planes that intersect in  $\overline{HG}$ . \_\_\_\_\_
- b) Are the points A, B, C and D collinear? \_\_\_\_\_
- c) Are the points A, B, C and D coplanar? \_\_\_\_\_
- d) Name 2 planes that do not intersect. \_\_\_\_\_
- e) Name 3 lines that intersect at C. \_\_\_\_\_

2.



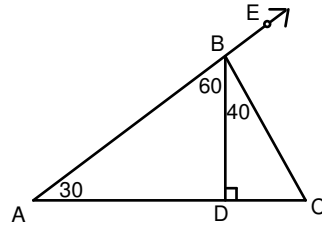
- a) The ray opposite to  $\overrightarrow{KN}$  is \_\_\_\_\_
- b) Another name for  $\overline{LM}$  is \_\_\_\_\_
- c)  $LN =$  \_\_\_\_\_ (what value)
- d) The coordinate of the midpoint of  $\overline{JM}$  is \_\_\_\_\_

3.



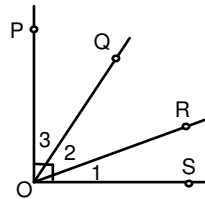
- a) If  $TE = .5x$  and  $EP = x$  then  $x =$  \_\_\_\_\_.
- b) The coordinate of E = \_\_\_\_\_
- c) If T is the midpoint of  $\overline{SP}$ , find the coordinate of S . \_\_\_\_\_

4.



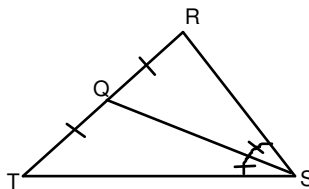
- An angle adjacent to  $\angle ADB$  is \_\_\_\_\_.
- Are A, B, and E collinear? \_\_\_\_\_
- Can you conclude from the diagram that  $\overline{BE} \cong \overline{BD}$ ? \_\_\_\_\_
- What postulate allows you to say  $m\angle ABD + m\angle DBC = m\angle ABC$ ?  
\_\_\_\_\_
- $m\angle CBE =$  \_\_\_\_\_.
- $m\angle BCD =$  \_\_\_\_\_.
- $m\angle BDA =$  \_\_\_\_\_.

5. Refer to the diagram.  $\overline{OR}$  is a bisector of  $\angle QOS$



- If  $m\angle 1 = 2x + 15$  and  $m\angle 2 = 5x - 8$  then  $x =$
- If  $m\angle 1 = x + 7$  and  $m\angle 3 = 2x$  then  $x =$

6. Name the definition or postulate that justifies each statement, given the markings on the diagram.



$$m\angle RSQ + m\angle QST = m\angle RST.$$

\_\_\_\_\_

$\overline{SQ}$  bisects  $\overline{RT}$

\_\_\_\_\_

Q is the midpoint of  $\overline{RT}$

\_\_\_\_\_

$$RT = RQ + QT$$

\_\_\_\_\_

Are R, Q and T collinear?

\_\_\_\_\_

Use sometimes, always or never.

7. Adjacent angles are \_\_\_\_\_ congruent.

8. Two intersecting lines \_\_\_\_\_ lie in exactly one plane.

9. A line and a point not on the line \_\_\_\_\_ lie in more than one plane.

## Answers Chapt 1 Extra Review

1.

- a) hgcd, hgfe      b) No      c) Yes      d) ABFE and DCGH  
e) BC, GC, DC

2. →

- a) KJ      b) LN      c) 4      d)  $\frac{1}{2}$

3.

- a)  $8\frac{2}{3}$       b)  $-4\frac{2}{3}$       c) -22

4.

- a) BDC      b) yes      c) NO      d) AAP      e) 80      f) 50      g) 90

5.

- a)  $7\frac{2}{3}$       b) 19

6.

AAP, Def Seg Bisector, Def of Midpoint, SAP, Yes

7. sometimes

8. always

9 never