1. Refer to the diagram:

![Diagram of a cube with labeled points A, B, C, D, E, F, G, and H.]

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.

![Diagram of a number line with points J, K, L, M, and N.]

a) The ray opposite to \( \overrightarrow{KN} \) is ____________

b) Another name for \( \overrightarrow{LM} \) is ____________

c) LN = _________ (what value)

d) The coordinate of the midpoint of \( \overline{JM} \) is ____________

3.

![Diagram of a number line with points S, T, E, and P.]

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.

a) An angle adjacent to $\angle ADB$ is ________.

b) Are A, B, and E collinear? ________

c) Can you conclude from the diagram that $\overline{BE} \cong \overline{BD}$? _______

d) What postulate allows you to say $m\angle ABD + m\angle DBC = m\angle ABC$? ______________

e) $m\angle CBE = ______$.

f) $m\angle BCD = ______$.

g) $m\angle BDA = ______$.

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

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

b) 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.

\[ m\angle RSQ + m\angle QST = m\angle RST. \]
\[ \overline{SQ} \text{ bisects } \overline{RT} \]
\[ Q \text{ is the midpoint of } \overline{RT} \]
\[ RT = RQ + QT \]

Are R, Q and T collinear?

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) ½

3. 
a) 8 2/3  
b) -4 2/3  
c) -22

4. 
a) BDC  
b) yes  
c) NO  
d) AAP  
e) 80  
f) 50  
g) 90

5. 
a) 7 2/3  
b) 19

6. 
AAP, Def Seg Bisctor, Def of Midpoint, SAP, Yes

7. sometimes

8. always

9 never