Examinations

Chapter 1

Indicate the best answer by writing the appropriate letter.

1. Which of the following sets of points are not coplanar?

a. E, H, O, G

b. K. O. G. E

c. E. O. F. J

 \mathbf{d} . H, K, O, J

2. Which of the following sets of points are contained in *more* than one plane?

 $\mathbf{a}.\ G,\ O,\ J$

b. E. O. G

c. H, E, G

d. G, O, H

3. How many planes contain point E and \overrightarrow{JK} ?

a. 0

b. exactly 1

c. unlimited d. unknown

Ex

4. If \overrightarrow{GH} bisects \overrightarrow{EF} , which statement is not necessarily true?

a. O is the midpoint of \overline{GH} .

b. $\overline{EO} \cong \overline{OF}$

c. E, F, G, H, and O are coplanar.

d. GO + OH = GH

5. Points A, B, C are collinear, but they do not necessarily lie on a line in the order named. If AB = 5 and BC = 3, what is the length of \overline{AC} ?

a. either 2 or 8

b. either 2 or 4

c. 2 **d.**

6. On a number line, point R has coordinate -5 and point S has coordinate 3. Point X lies on \overrightarrow{SR} and SX = 5. Find the coordinate of X.

a. -10

b. -2

c. 8

d. 0

Exs. 7-9

7. Which angle appears to be obtuse?

a. ∠AEB

b. ∠*DEB*

c. ∠ CEA

d. ∠AED

8. If \overrightarrow{EC} bisects $\angle DEB$, \overrightarrow{EB} bisects $\angle DEA$, and $m \angle BEC = 28$, find the measure of $\angle CEA$.

a. 28c. 84

b. 56

d. 112

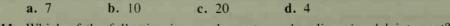
9. Which two angles are adjacent angles?

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a. $\angle DEB$ and $\angle BEA$

b. $\angle DEB$ and $\angle CEA$

- c. $\angle DEC$ and $\angle BEA$
- **d.** $\angle DEA$ and $\angle DEC$
- 10. M is the midpoint of \overline{YZ} . If YM = r + 3 and YZ = 3r 1, find MZ.



- 11. Which of the following is not always true when lines j and k intersect?
 - a. Exactly one plane contains line j.
 - b. The lines intersect in exactly one point.
 - c. All points on j and k are coplanar points.
 - **d.** Given any point P on j and any point Q on k, P and Q are collinear points.