

Geometry Study Guide 1.2-1.4

vocab - def. in book

1 \overleftrightarrow{PQ} , plane PSR (other variations acceptable)

2 noncollinear

3 non collinear

4 plane FBC (other variations acceptable)

5 \overrightarrow{BA}

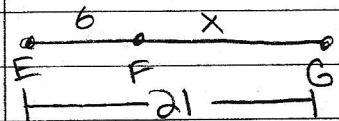
6 \overrightarrow{BB} (\overrightarrow{BC} ok also)

7 \overline{AB} , \overline{AC} , \overline{BC}

8 \overleftrightarrow{PQ} (when planes intersect, they form a line)

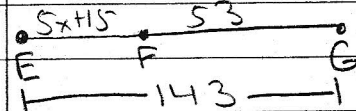
9 \overleftrightarrow{UY}

10


$$\begin{aligned} EF + FG &= EG \\ 6 + x &= 21 \\ x &= 15 \end{aligned}$$

$$\boxed{FG = 15}$$

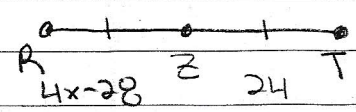
11


$$\begin{aligned} EF + FG &= EG \\ (5x+15) + 53 &= 143 \\ 5x + 68 &= 143 \\ -68 \quad -68 & \end{aligned}$$

$$\begin{aligned} 5x &= 75 \\ \frac{5x}{5} &= \frac{75}{5} \\ \boxed{x} &= \boxed{15} \end{aligned}$$

Geo. SG 1.2-1.4

12 $AC = |-6 - 0| = 6$
 \boxed{BE}

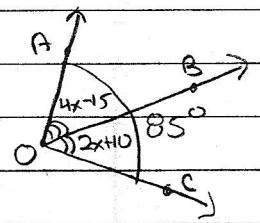
13  $RZ \cong ZT$ (bc of Z being midpoint)
 $4x - 28 = 24$
 $\quad \quad \quad +28 \quad \quad +28$
 $RZ = 4(13) = 28 = 24$ $\frac{4x}{4} = \frac{52}{4}$
 $RT = 24 + 24 = 48$ $x = 13$

$x = 13$
 $RZ = 24$
 $RT = 48$

14 $\frac{-6+8}{2} = 1$ \boxed{D}

15 $125 - 80 = 45$ $\angle EBG = 45^\circ$ acute
 $\angle EBC = 100^\circ$ obtuse

16 $\boxed{54^\circ}$

17  $m\angle AOB + m\angle BOC = m\angle AOC$
 $(4x - 15) + (2x + 10) = 85$
 $6x - 5 = 85 + 5$
 $\frac{6x}{6} = \frac{90}{6}$

$x = 15$
 $m\angle BOC = 2(15) + 10 = 40^\circ$
 $m\angle AOB = 4(15) - 15 = 45^\circ$

$\angle BOC = 40^\circ$
 $\angle AOB = 45^\circ$

18 not there
 skip