Chpt 1 Review Wksht Solutions

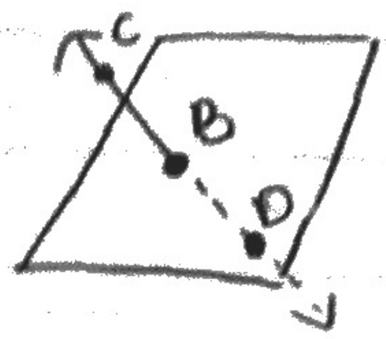
4) points C, G, D, B

5) $\overleftrightarrow{BC}$, $\overleftrightarrow{CG}$, $\overleftrightarrow{GB}$

6) plane S, plane AGE

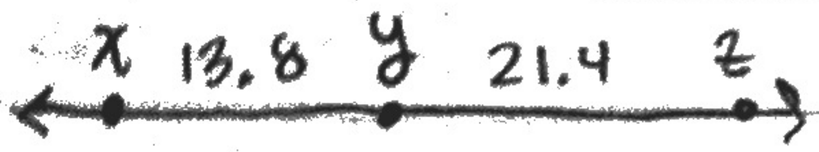
7) 

8) 

9) 

10) JL = 3.5

11) HK = 5

12) 

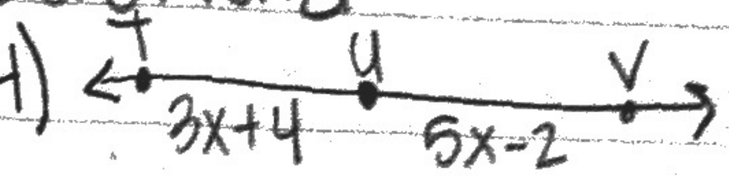
$yz = 13.8 + 21.4 = 35.2$

13) $3x + 6x + 4 = 14x - 6$

$9x + 4 = 14x - 6$
$+6 \quad +6$

$9x + 10 = 14x$
$-9x \quad -9x$

$10 = 5x$

14) 

$TU = UV$ (since U is the Md Pt)

$3x + 4 = 5x - 2$
$+2 \quad +2$

$3x + 6 = 5x$
$-3x \quad -3x$

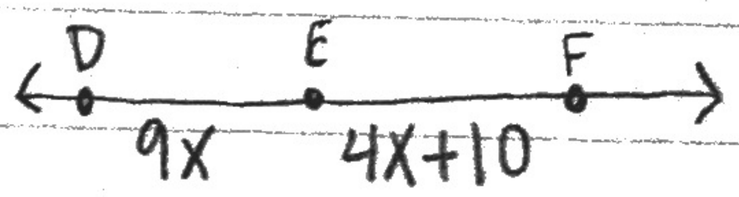
$6 = 2x$

$x = 3$

$TU = 3(3) + 4 = 13$

$UV = 5(3) - 2 = 13$

$TV = 13 + 13 = 26$

15) 

$9x = 4x + 10$
$-4x \quad -4x$

$5x = 10$

$x = 2$

$DE = 9(2) = 18$

$EF = 4(2) + 10 = 18$

$DF = 36$

$x = 2$

$PR = 14(2) - 6$
$= 28 - 6$

$PR = 22$

17) $13x+20+10x+27=116$

$23x+47=116$

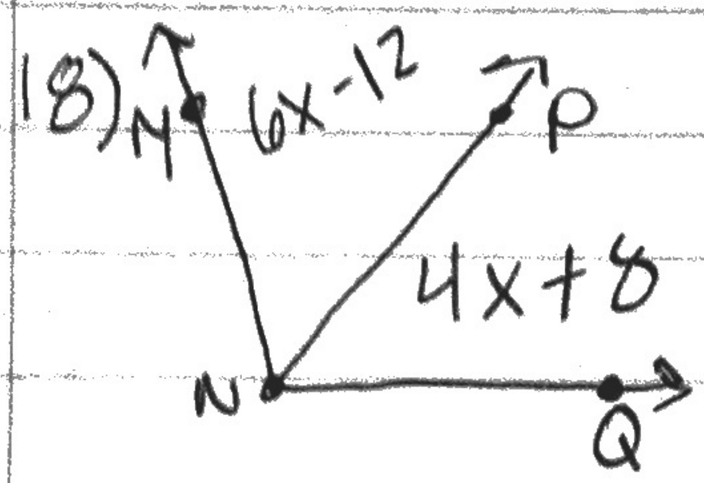
$-47\quad -47$

$23x=69$

$x=3$

$m\angle HJK = 13(3)+20=89$

18)



$6x-12=4x+8$

$+12\quad +12$

$6x=4x+20$

$-4x\quad -4x$

$2x=20$

$x=10$

$m\angle MNP = 6(10)-12 = 48°$

$m\angle PNQ = 4(10)+8 = 48°$

$m\angle MNQ = 96°$

19) adjacent

20) adjacent ; form a linear pair

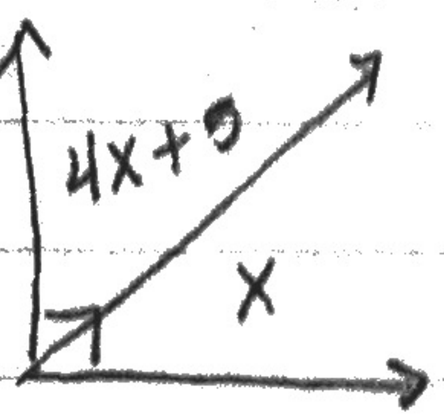
21) not adjacent

22) complement = $90-74.6=15.4$

supplement = $180-74.6=105.4$

23) complement = $90-(2x-4)=90-2x+4=94-2x$

supplement = $180-(2x-4)=180-2x+4=184-2x$

24) 

$4x+5+x=90$

$5x+5=90$

$5x=85$

$x=17°$

$4(17)+5=73°$

25) $2(4x-1)+2(3x)=P$

$8x-2+6x=P$

$14x-2=P$

$(4x-1)3x=A$

$12x^2-3x=A$

26) $4(x+4)=P$

$4x+16=P$

$(x+4)(x+4)=A$

$x^2+8x+16=A$

27) $12+8+x-5=P$

$15+x=P$

$A=\frac{1}{2}(6)(x-5)=4x-20$

28) $2(5x+7)+2(20)=P$

$10x+14+40=P$

$10x+54=P$

$(5x+7)(20)=A$

$100x+140=A$

29) $C=2\pi r=42\pi\approx 131.88$ m

30) $C=\pi d=14\pi=43.96$ ft

31) $A=\frac{1}{2}bh$

$102=\frac{1}{2}(17)h$

$204=17h$

$12h=12m$

32) $\left(\frac{3+(-1)}{2}, \frac{2+4}{2}\right)$

$y(1, 3)$

33) $\frac{5+x}{2} = -2 \quad \frac{0+y}{2} = 3$

$5+x = -4 \quad y = 6$

$x = -9 \quad (-9, 6)$

34) $\frac{-4+x}{2} = -2 \quad \frac{4+y}{2} = 3$

$-4+x = -4 \quad 4+y = 6$

$x = 0 \quad y = 2$

$(0, 2)$

35) $\sqrt{(-2-6)^2+(4-1)^2}$

$= \sqrt{(-8)^2+(3)^2}$

$= \sqrt{64+9} = \sqrt{73} \approx 8.5$

36) $\sqrt{(0+2))^2+(3+4))^2}$

$= \sqrt{(2)^2+(7)^2}$

$= \sqrt{4+49} = \sqrt{53} \approx 7.3$

37) $\sqrt{(-4-3)^2+(2+2))^2}$

$= \sqrt{(-7)^2+(4)^2}$

$= \sqrt{49+16} = \sqrt{65} \approx 8.1$

38) Rotation

39) Translation

40) $X'(-5+4, -4+5)$

$= X'(-1, 1)$

$Y'(-3+4, -1+5)$

$= Y'(1, 4)$

$Z'(-2+4, -2+5)$

$= Z'(2, 3)$