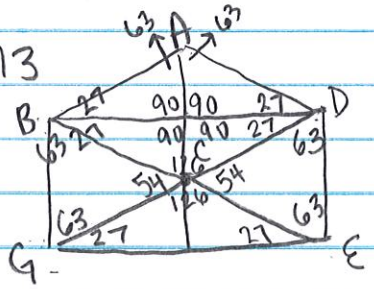
p. 321 #1-27 ALL

SKIP #21, 22, 26

1. Always
2. Sometimes
3. Always
4. Sometimes
5. Always

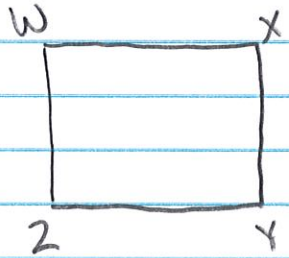
Always, Sometimes or Never?

6-13



6. 27°
7. 54°
8. 126°
9. 54°
10. 126°
11. 90°
12. 90°
13. 63°

14.

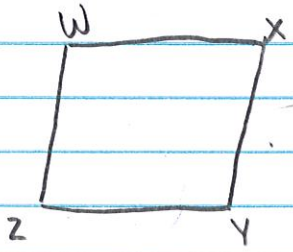


$1-10x = 14+3x$ $\quad 1-10(-1)=11$

$-13 = 13x \quad x=-1$ $\quad 14+3(-1)=11$

$\boxed{XY=11}$

15.



$24(10-x) = 6(x+15)$

$240-24x = 6x+90$

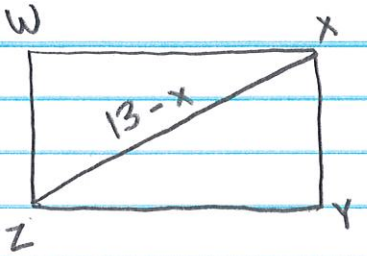
$30x = 156$

$x = 5$

$\angle X = 24(10-5) = 120°$

$\boxed{\angle Y = 60°}$

16.



$5x - 1 + 13 - x = 24$

$4x + 12 = 24$

$4x = 12$

$x = 3$

$XZ = WY = 13 - 3 = \boxed{10}$

17. $4x + 17 = 8x - 3$

$4x = 20$ $\boxed{x = 5}$

$7y - 5 + 108 = 180$

$7y + 103 = 180$

$7y = 77$ $\boxed{y = 11}$

Rhombus – all sides $\cong$

18. $5y + 16 = 10y - 29$

$5y = 45$ $\boxed{y = 9}$

$6x + 21 = 45$

$6x = 24$

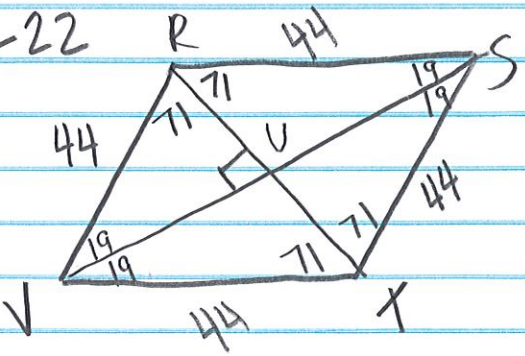
$\boxed{x = 4}$

Square

$\cong$ sides

4 right angles

19–22



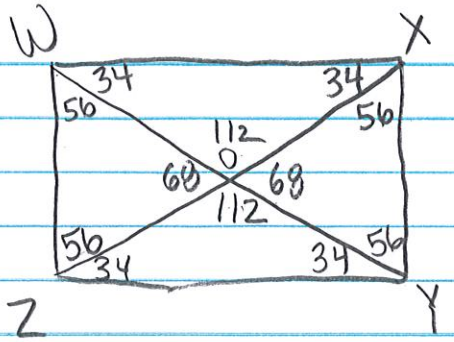
19. 71°

20. 38°

21.] SKIP

22.

23. 34°
24. 112°
25. 16.5
26. SKIP



27.

Statement	Reason
1.	1. Given
2.	2. Diagonals bisect eachother
3. $\overline{HD} \cong \overline{DT}$	3.
4. DART is a rhombus	4.
5.	5. Def. of rhombus
6.	6. Substitution
7. WA = WD + DA HT = HD + DT	7.
8. WA = HT	8.
9.	9. Def. of rectangle