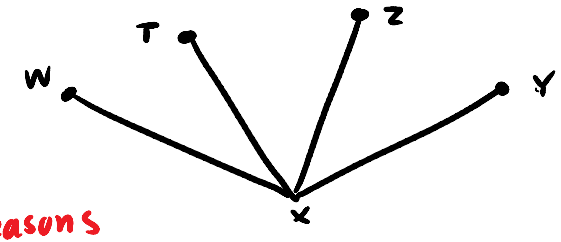
Review

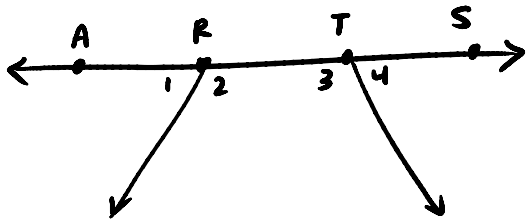
pg. 105: 3, 6, 10, 15, 22, 28

#3 Given: $\angle WXT \cong \angle YXZ$
Prove: $\angle WXZ \cong \angle TXY$



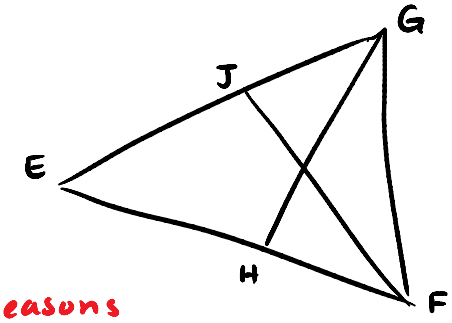
Statements	Reasons
1. $\angle WXT \cong \angle YXZ$	1. Given
2. $\angle WXZ \cong \angle TXY$	2. If the same $\angle$ is added to $\cong$ $\angle$'s → $\angle$'s $\cong$

#6 Given: Diagram as shown
$\angle 1 \cong \angle 4$
Prove: $\angle 2 \cong \angle 3$



Statements	Reasons
1. Diagram as shown	1. Given
2. $\angle 1 \cong \angle 4$	2. Given
3. $\angle ART$ is a str. $\angle$	3. Assumed
4. $\angle 1$ is supp. to $\angle 2$	4. If 2 $\angle$'s form a straight $\angle$ → $\angle$'s supp.
5. $\angle 3$ is supp to $\angle 4$	5. " "
6. $\angle 2 \cong \angle 3$	6. If 2 $\angle$'s are supp. to $\cong$ $\angle$'s → $\angle$'s $\cong$

#10 Given: $\angle EGF \cong \angle EFG$
$\angle EGH \cong \angle EFJ$
Conc: $\angle HGF \cong \angle JFG$

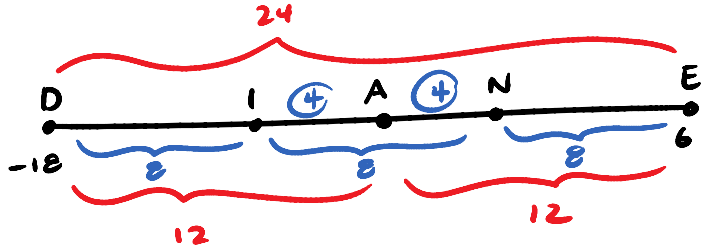


Statements	Reasons
1. $\angle EGF \cong \angle EFG$	1. Given
2. $\angle EGH \cong \angle EFJ$	2. Given
3. $\angle HGF \cong \angle JFG$	3. If 2 $\cong$ $\angle$'s are subtracted from 2 $\cong$ $\angle$'s → differences are $\cong$

#15 Pt A is the midpt of $\overline{DE}$ and DA = 12

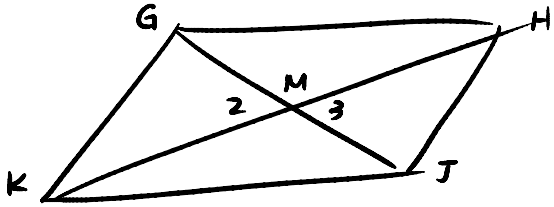
Points I and N are trisection points of $\overline{DE}$.

Find AN. (4)



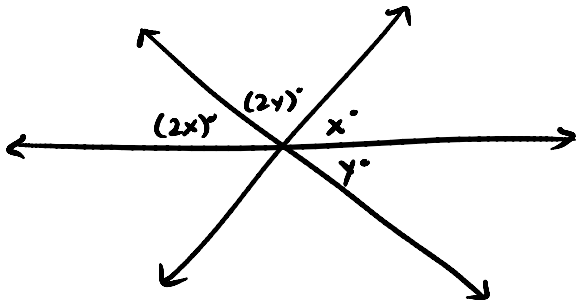
#22 Given: ∠1 is comp to ∠3
∠4 is comp to ∠2

Conc. ∠1 ≅ ∠4



Statements	Reasons
1. ∠1 is comp. to ∠3	1. Given
2 ∠4 is comp. to ∠2	2 Given
3 ∠2 ≅ ∠3	3 V.A. are ≅
4. ∠1 ≅ ∠4	4 If 2 ∠'s are comp. to ≅ ∠'s → ∠'s ≅

#28 Solve for x and y



$2x+2y+x=180$

$\boxed{3x+2y=180}$

$2x=y$

$3x+2(2x)=180$

$3x+4x=180$

$7x=180$

$\boxed{x=\frac{180}{7}}$

$y=2\left(\frac{180}{7}\right)$

$\boxed{y=\frac{360}{7}}$