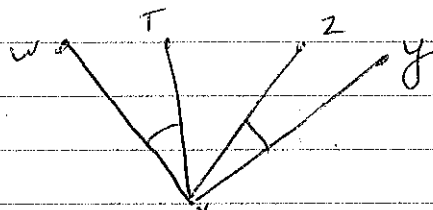


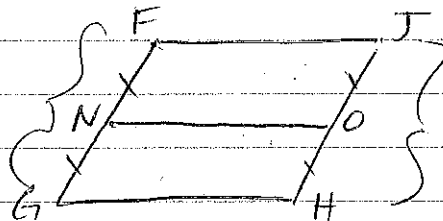
p. 105 : 3-9, 10, 12, 15, 22, 26

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



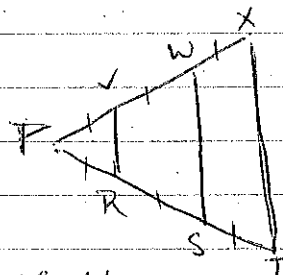
Statements	Reasons
① $\angle WXT \cong \angle YXZ$	① Given
② $\angle WXZ \cong \angle TXY$	② Addition Property

4. Given: $\overline{FG} \cong \overline{JH}$
 N is midpt of \overline{FG}
 O is midpt of \overline{JH}
 Prove: $\overline{NG} \cong \overline{OH}$



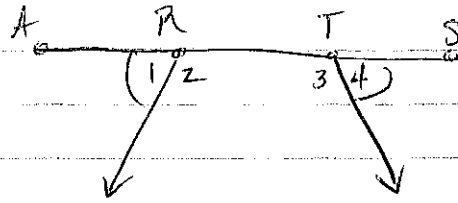
Statements	Reasons
① $\overline{FG} \cong \overline{JH}$	① Given
② N is midpt of \overline{FG}	② Given
③ O is midpt of \overline{JH}	③ Given
④ $\overline{FN} \cong \overline{NG}$, $\overline{JO} \cong \overline{OH}$	④ If midpt of a seg. cuts a seg. into 2 \cong pieces
⑤ $\overline{NG} \cong \overline{OH}$	⑤ Division Property

5. Given: \overline{RV} & \overline{SW} trisect \overline{PT} & \overline{PX}
 $\overline{ST} \cong \overline{WX}$
 Prove: $\overline{PT} \cong \overline{PX}$



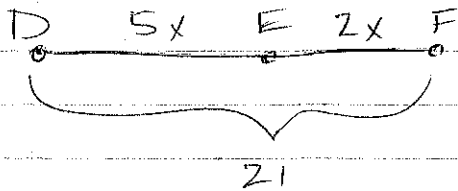
Statements	Reasons
① \overline{RV} & \overline{SW} trisect \overline{PT} & \overline{PX}	① Given
② $\overline{ST} \cong \overline{WX}$	② Given
③ $\overline{PV} \cong \overline{VW} \cong \overline{WX}$, $\overline{PR} \cong \overline{RS} \cong \overline{SF}$	③ If trisector cuts a segment into 3 \cong pieces
④ $\overline{PT} \cong \overline{PX}$	④ Multiplication Property

6. Given: Diagram
 $\angle 1 \cong \angle 4$
 Prove: $\angle 2 \cong \angle 3$



Statements	Reasons
① Diagram	① Given
② $\angle 1 \cong \angle 4$	② Given
③ $\angle 1$ supp to $\angle 2$	③ If the sums of 2 angles are a straight line, then the lines are supp.
④ $\angle 3$ supp to $\angle 4$	④ Same as 3
⑤ $\angle 2 \cong \angle 3$	⑤ If 2 \angle 's are supp to $\cong \angle$'s, then they are \cong .

7.



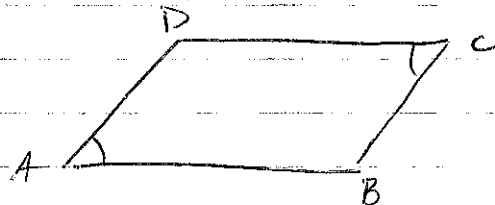
$$5x + 2x = 21$$

$$7x = 21$$

$$\underline{x = 3}$$

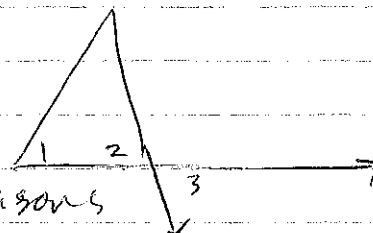
$\rightarrow EF = 5(2) = 10$

8. Given: $\angle A$ is supp to $\angle D$
 $\angle A \cong \angle C$
 Prove: $\angle C$ is supp to $\angle D$



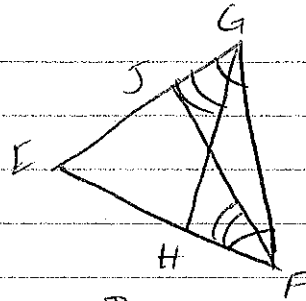
Statements	Reasons
① $\angle A$ is supp to $\angle D$	① Given
② $\angle A \cong \angle C$	② Given
③ $\angle C$ is supp to $\angle D$	③ Substitution Property

9. Given: $\angle 1 \cong \angle 3$
 Prove: $\angle 1 \cong \angle 2$



Statements	Reasons
① $\angle 1 \cong \angle 3$	① Given
② $\angle 2 \cong \angle 3$	② Vertical Angles
③ $\angle 1 \cong \angle 2$	③ Transitive Property

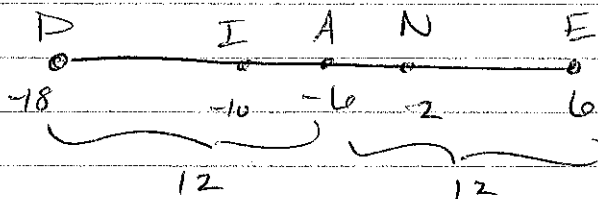
10. Given: $\angle EGF \cong \angle EFG$
 $\angle EGH \cong \angle EFJ$
 Prove: $\angle HGF \cong \angle JFG$



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 Subtraction Property

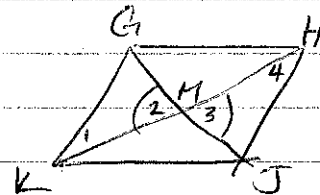
12. $x + 2x + 6 = 90$
 $3x = 84$
 $x = 28 \rightarrow$ larger angle $= 90 - 28 = 62^\circ$

15



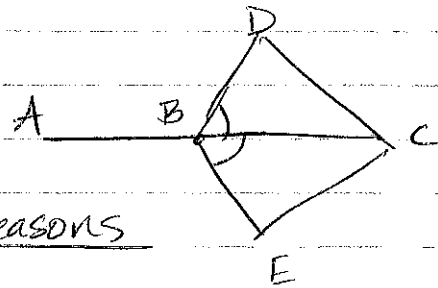
$\overline{AN} = 4$

22. Given: $\angle 1$ is comp to $\angle 3$
 $\angle 4$ is comp to $\angle 2$
 Prove: $\angle 1 \cong \angle 4$



Statements	Reasons
① $\angle 1$ is comp to $\angle 3$	① Given
② $\angle 4$ is comp to $\angle 2$	② Given
③ $\angle 2 \cong \angle 3$	③ Vertical \angle 's are \cong
④ $\angle 1 \cong \angle 4$	④ If 2 \angle 's are comp. to $\cong \angle$'s, then they are \cong .

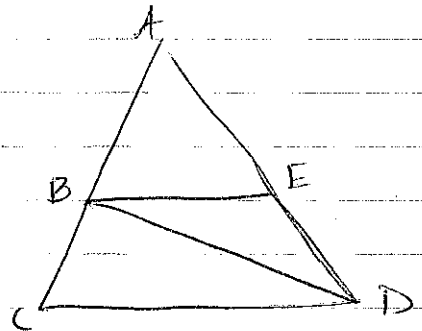
26. Given: BC bisects $\angle DBE$
 Prove: $\angle ABD \cong \angle ABE$



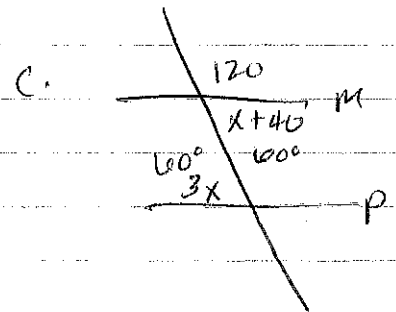
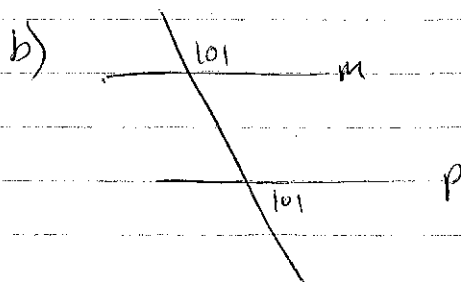
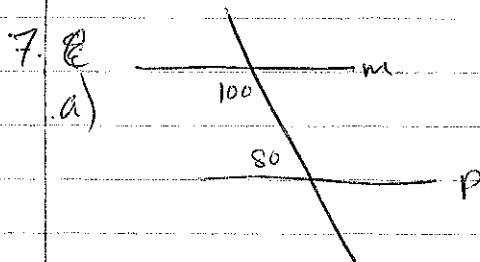
Statements	Reasons
① BC bisects $\angle DBE$	① Given
② $\angle DBC \cong \angle EBC$	② A bis. cut's an \angle into 2 \cong \angle 's
③ $\angle ABD$ is supp to $\angle DBC$	③ If the sum of 2 \angle 's is a straight line, then the \angle 's are supp.
④ $\angle ABE$ is supp to $\angle EBC$	④ Same as 3
⑤ $\angle ABD \cong \angle ABE$	⑤ If 2 \angle 's are supp to \cong \angle 's, then they are \cong .

P. 206 # 2

2. a) $\angle ABE + \angle BCD$
 b) $\angle EBD + \angle BDC$



P. 265 # 7, 25

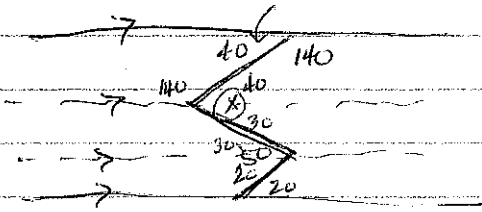


Yes, all p b/c same side interior \angle 's are supplementary

No, b/c same side ext \angle 's need to be supplementary, not \cong

$3x = x + 40$
 $2x = 40$
 $x = 20$
 Yes, b/c alt int. \angle 's are \cong .

25



$$x = 40 + 30 = 70$$