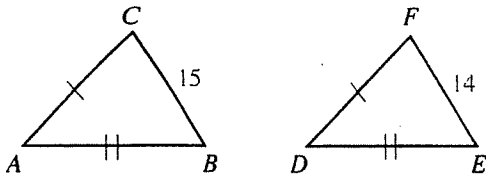
6.5 KEY

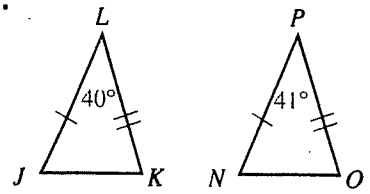
What can you deduce? Name the theorem that supports your answer.

1



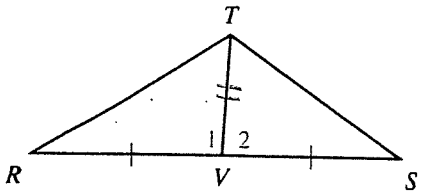
m∠A > m∠D
SSS

2.



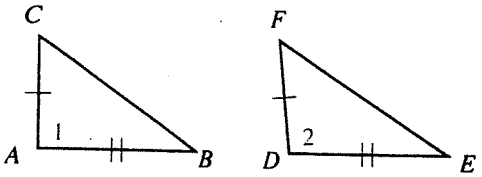
NO > JK SAS

3. $m\angle 1 > m\angle 2$



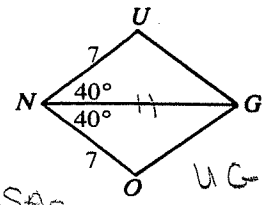
RT > TS SAS

4. $\angle 1$ is a rt. $\angle$; $\angle 2$ is an obtuse $\angle$.



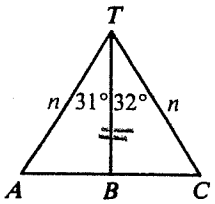
EF > CB SAS

5.



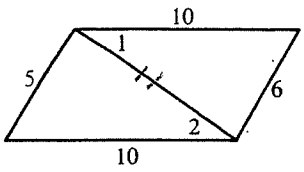
UG = OG
SAS

6.



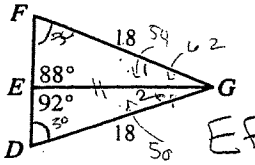
BC > AB
SAS

7.



SSS
m∠1 > m∠2

8.

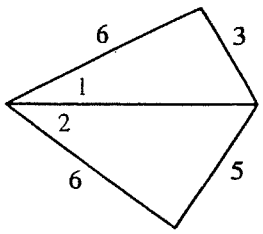


EF > ED
SAS

m∠F + m∠88 + m∠1 = m∠ED + 92 + m∠2
m∠1 = m∠2 + 4

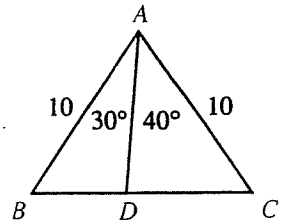
Complete each statement using >, <, or =.

9.



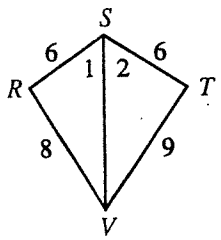
$m\angle 1 \leq m\angle 2$

10.



$CD \geq BD$

11.



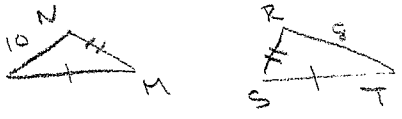
$m\angle 1 \leq m\angle 2$

Determine whether the statement is always, sometimes or never true.

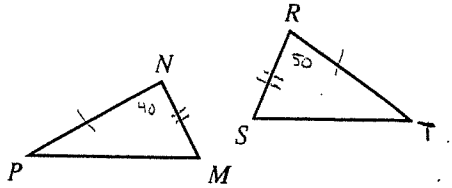
12. If $PN = RT$, $MN = RS$, and $m\angle N < m\angle R$, then $PM > ST$.

Never

13. If $PM = ST$, $MN = RS$ and $PN > RT$, then $m\angle M > m\angle S$.



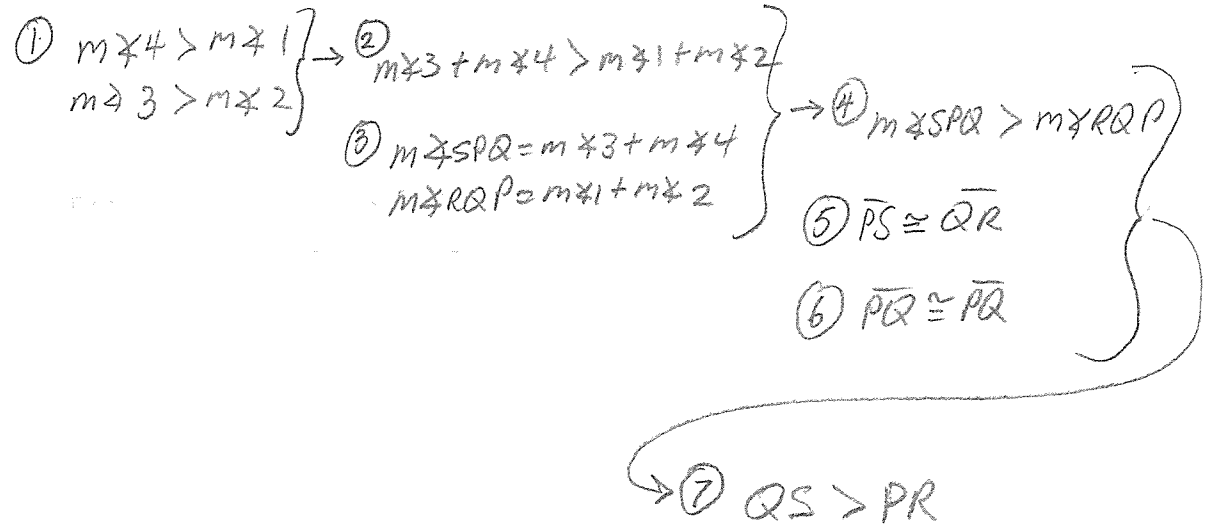
Always
SSS



6.5 Proofs

#1 & #2 - skip, diagram is incorrect.

③



① Given
② If $a > b$ and $c > d$, then $a + c > b + d$.
③ Angle Add. Postulate
④ Substitution
⑤ Given
⑥ Reflexive property
⑦ SAS Inequality thm.