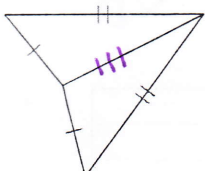
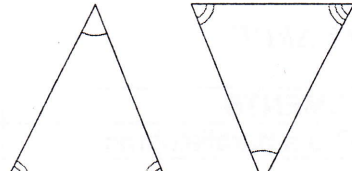
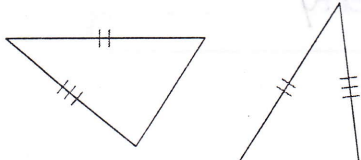


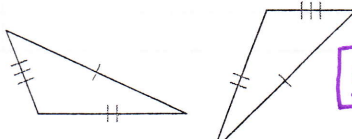
Side-Side-Side (SSS) Congruence Postulate

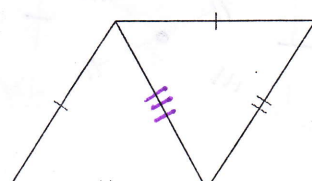
State if the two triangles are congruent. If they are, state how you know.

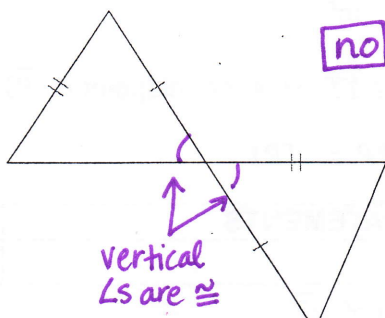
1)  yes, by SSS

2)  no

3)  no, only 2 pairs of sides are \cong

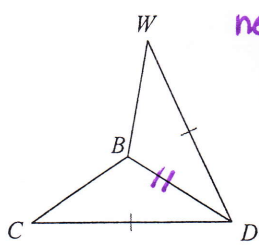
4)  yes, by SSS

5)  yes, by SSS

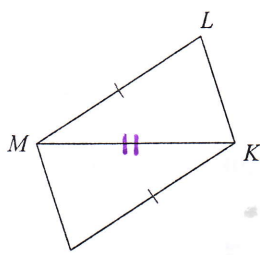
6)  no
vertical \angle s are \cong

State what additional information is required in order to know that the triangles are congruent for the reason given.

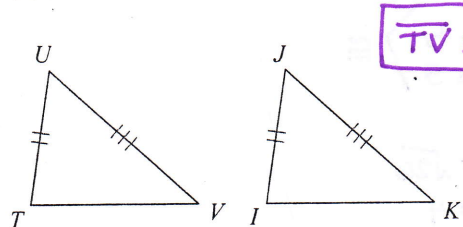
7) SSS

 need to know:
 $\overline{BC} \cong \overline{BW}$

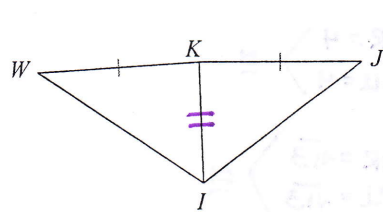
8) SSS

 $\overline{MH} \cong \overline{KL}$

9) SSS

 $\overline{TV} \cong \overline{TK}$

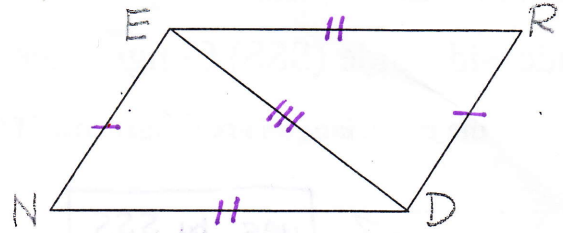
10) SSS

 $\overline{WI} \cong \overline{JI}$

11. Complete the proof

Given: Quadrilateral $NERD$ is a parallelogram

Prove: $\triangle NED \cong \triangle RDE$

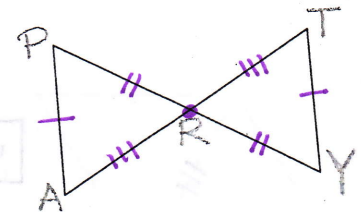


STATEMENTS	REASONS
1. Quadrilateral $NERD$ is a parallelogram	1. Given
2. $\overline{NE} \cong \overline{RD}$	2. Opp. sides of a parallelogram are \cong
3. $\overline{ND} \cong \overline{RE}$	3. opp. sides of a parallelogram are \cong
4. $\overline{DE} \cong \overline{DE}$	4. Reflexive Property
5. $\triangle NED \cong \triangle RDE$	5. SSS Postulate

12. Complete the proof

Given: $\overline{PA} \cong \overline{YT}$, R is the midpoint of \overline{PY} , R is the midpoint of \overline{AT}

Prove: $\triangle ARP \cong \triangle TRY$



STATEMENTS	REASONS
1. $\overline{PA} \cong \overline{YT}$	1. Given
2. R is the midpoint of \overline{PY}	2. Given
3. R is the midpoint of \overline{AT}	3. Given
4. $\overline{PR} \cong \overline{RY}$	4. Definition of Midpoint
5. $\overline{AR} \cong \overline{RT}$	5. Definition of Midpoint
6. $\triangle ARP \cong \triangle TRY$	6. SSS Postulate

Complete P. 667 # 19 and 20.

(19) $\left. \begin{array}{l} QS = \sqrt{5} \\ TV = \sqrt{5} \end{array} \right\} \cong$

$\left. \begin{array}{l} SR = 4 \\ VU = 4 \end{array} \right\} \cong$

$\left. \begin{array}{l} QR = \sqrt{13} \\ TU = \sqrt{13} \end{array} \right\} \cong$

The Δ s are \cong by SSS.

(20) $\left. \begin{array}{l} AB = \sqrt{17} \\ DE = \sqrt{17} \end{array} \right\} \cong$

$\left. \begin{array}{l} BC = 5 \\ EF = 5 \end{array} \right\} \cong$

$\begin{array}{l} AC = \sqrt{26} \\ DF = 4 \end{array}$

The Δ s are not \cong .