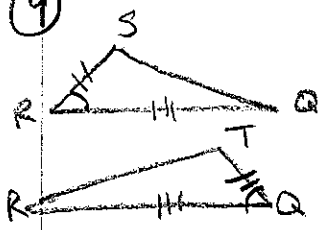
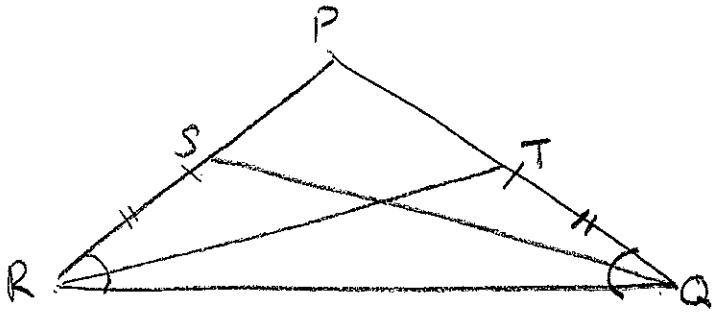
4.5

(9)

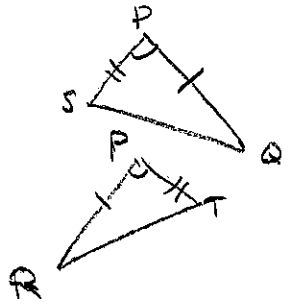


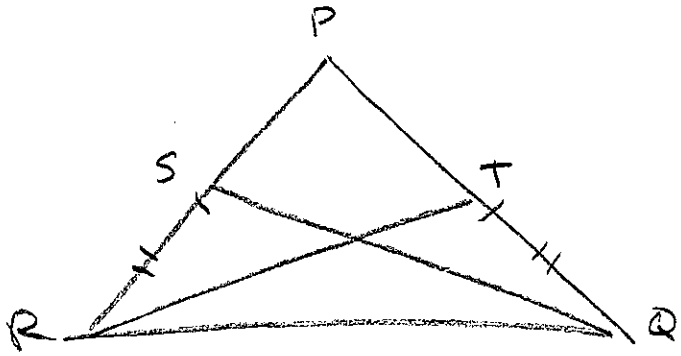


(a)

1. $\overline{PR} \cong \overline{PQ}$; $\overline{SR} \cong \overline{TQ}$	1. Given
2. $\angle PRQ \cong \angle PQR$	2. Isosc. $\triangle$ Thm
3. $\overline{RQ} \cong \overline{RQ}$	3. Reflexive
4. $\triangle RQS \cong \triangle QRT$	4. SAS
5. $\overline{QS} \cong \overline{RT}$	6. CPCTC

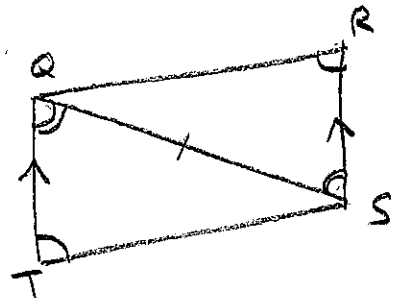
(b)





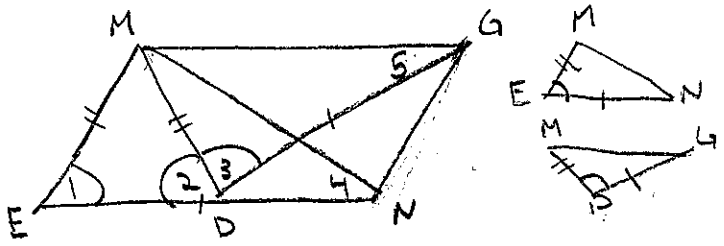
1. $\overline{PR} \cong \overline{PQ}$; $\overline{SR} \cong \overline{TQ}$	1. Given
2. $\angle P \cong \angle P$	2. Reflexive
3. $PR = PQ$; $SR = TQ$	3. def. $\cong$
4. $PR = PS + SR$; $PQ = PT + TQ$	4. Seg. Addn. Post.
5. $PS + SR = PT + TQ$	5. subst.
6. $PS = PT$	6. Subtraction
7. $\overline{PS} \cong \overline{PT}$	7. def. $\cong$
8. $\triangle PQS \cong \triangle PRT$	8. SAS
9. $\overline{QS} \cong \overline{RT}$	10. CPCTC

14.



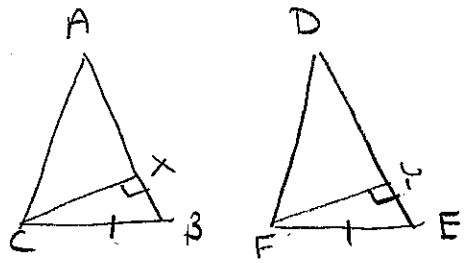
1. $\angle R \cong \angle T$, $\overline{RS} \parallel \overline{QT}$	1. Given
2. Draw $\overline{QS}$	2. Through 2 pts. there is a line
3. $\angle RSQ \cong \angle SQT$	3. $\parallel$ lines $\rightarrow$ alt. int. $\angle$s $\cong$
4. $\overline{QS} \cong \overline{QS}$	4. Reflexive
5. $\triangle QST \cong \triangle SQR$	5. AAS
6. $\overline{RS} \cong \overline{TQ}$	6. CPCTC

15.



1. $\angle 1 \cong \angle 2 \cong \angle 3$, $\overline{EN} \cong \overline{DG}$	1. Given
2. $\overline{EM} \cong \overline{DM}$	2. if 2 $\angle$s $\triangle \cong \rightarrow$ Sides opp. $\cong$
3. $\triangle MNE \cong \triangle MGD$	3. SAS
4. $\angle 4 \cong \angle 5$	4. CPCTC

(16) Given: $\triangle ABC \cong \triangle DEF$
$\overline{CX} \perp \overline{AB}$; $\overline{EY} \perp \overline{DE}$



Prove: $\overline{CX} \cong \overline{EY}$

1. $\overline{CX} \perp \overline{AB}$; $\overline{FY} \perp \overline{DE}$	1. Given
1. $\triangle ABC \cong \triangle DEF$	1. Given
2. $\overline{CB} \cong \overline{FE}$	2. CPCTC
3. $\angle CXB$ is rt. $\angle$ $\angle FYE$ is rt. $\angle$	3. def. $\perp$
4. $\triangle CXB$ is rt $\triangle$ $\triangle FYE$ is rt. $\triangle$	4. def. rt. $\triangle$