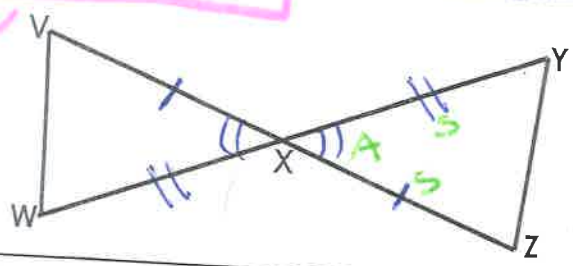
CPCTC PROOF #1

Given: X is the midpoint of $\overline{VZ}$, X is the midpoint of $\overline{WY}$

Prove: $\angle XVW \cong \angle XZY$



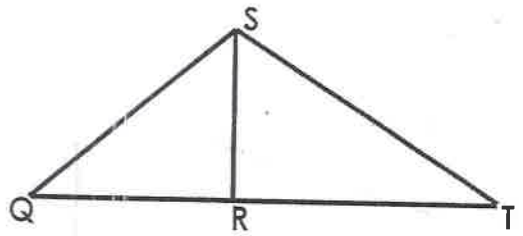
Statements	Reasons
X is midpoint $\overline{VZ}$	Given
$\overline{VX} \cong \overline{ZX}$	Def. Midpoint
X is midpoint $\overline{WY}$	Given
$\overline{WX} \cong \overline{YX}$	Def. Midpoint
$\angle WXV \cong \angle YXZ$	Vertical
$\triangle VWX \cong \triangle ZYX$	SAS
$\angle XVW \cong \angle XZY$	CPCTC

Given | Def. of Midpoint | $\overline{VX} \cong \overline{ZX}$ | Def. of Midpoint | $\angle XVW \cong \angle XZY$ | X is the midpoint of $\overline{VZ}$ | Given | $\angle WXV \cong \angle YXZ$ | $\overline{WX} \cong \overline{YX}$ | $\triangle VWX \cong \triangle ZYX$ | Vertical Angles | X is the midpoint of $\overline{WY}$ | CPCTC | SAS

PCTC PROOF #2

Given: $\overline{QS} \cong \overline{TS}$, R is the midpoint of $\overline{QT}$

Prove: $\angle RQS \cong \angle RTS$



Statements	Reasons

$\overline{RS} \cong \overline{RS}$ | Reflexive Property | $\overline{QS} \cong \overline{TS}$ | Given | $\angle RQS \cong \angle RTS$ | Def. of Midpoint | Given | D | $\overline{QR} \cong \overline{TR}$ | CPCTC | SSS | R is the midpoint of $\overline{QT}$ | $\triangle QRS \cong \triangle TRS$