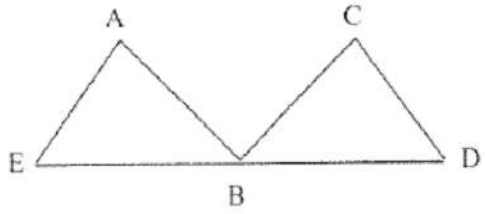
1. Given: $\overline{AE} \cong \overline{CB}$, $\overline{AB} \cong \overline{CD}$, and B is the midpoint of $\overline{ED}$

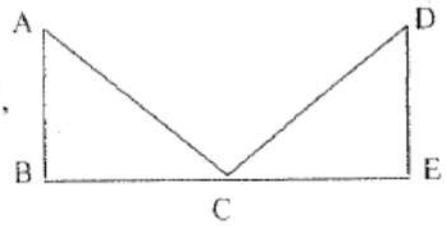


Prove: $\Delta AEB \cong \Delta CBD$

(Hint: Draw the information on the picture as you know it.)

statements	reasons
1. $\overline{AE} \cong \overline{CB}$, $\overline{AB} \cong \overline{CD}$, and B is the midpoint of $\overline{ED}$	1.
2. $\overline{EB} \cong \overline{DB}$	2.
3. $\Delta AEB \cong \Delta CBD$	3.

2. Given: $\overline{AB} \perp \overline{BE}$, $\overline{DE} \perp \overline{BE}$, $\overline{AC} \cong \overline{DC}$, and $\angle BAC \cong \angle EDC$

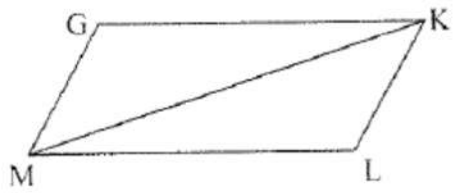


Prove: $\Delta ABC \cong \Delta DEC$

statements	reasons
1. $\overline{AB} \perp \overline{BE}$, $\overline{DE} \perp \overline{BE}$, $\overline{AC} \cong \overline{DC}$, and $\angle BAC \cong \angle EDC$	1.
2. $\angle B$ and $\angle E$ are right angles	2.
3. $\angle B \cong \angle E$	3.
4. $\Delta ABC \cong \Delta DEC$	4.

3. Given: $\overline{GK} \cong \overline{ML}$, $\angle GKM \cong \angle LMK$

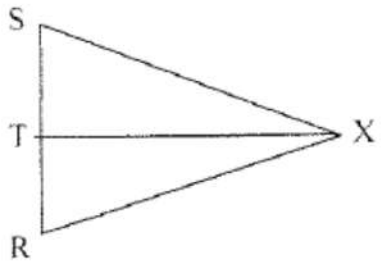
Prove: $\Delta GKM \cong \Delta LMK$



statements	reasons
1. $\overline{GK} \cong \overline{ML}$, $\angle GKM \cong \angle LMK$	1.
2. $\overline{MK} \cong \overline{MK}$	2.
3. $\Delta GKM \cong \Delta LMK$	3.

4. Given: $\angle S \cong \angle R$ and $\overline{XT}$ bisects $\angle SXR$

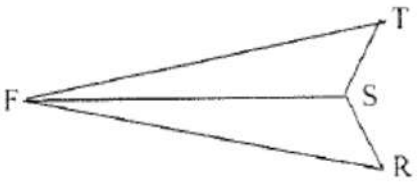
Prove: $\Delta SXT \cong \Delta RXT$



statements	reasons
1. $\angle S \cong \angle R$ and $\overline{XT}$ bisects $\angle SXR$	1.
2. $\angle SXT \cong \angle RXT$	2.
3. $\overline{XT} \cong \overline{XT}$	3.
4. $\Delta SXT \cong \Delta RXT$	4.

5. Given: $\overline{FT} \cong \overline{FR}$ and $\overline{ST} \cong \overline{SR}$

Prove: $\Delta FTS \cong \Delta FRS$

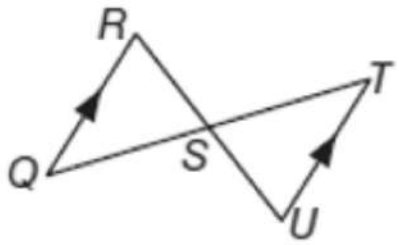


statements	reasons
1. $\overline{FT} \cong \overline{FR}$ and $\overline{ST} \cong \overline{SR}$	1.
2.	2. Reflexive Property
3.	3.

Prove each of the following:

Given: S is the midpoint of $\overline{QT}$.
$\overline{QR} \parallel \overline{TU}$

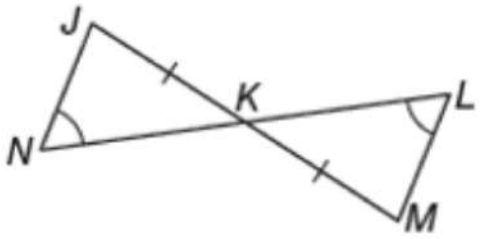
Prove $\Delta QSR \cong \Delta TSU$



Given: $\angle N \cong \angle L$

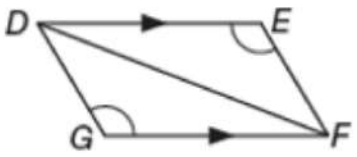
$\overline{JK} \cong \overline{MK}$

Prove: $\Delta JKN \cong \Delta MKL$



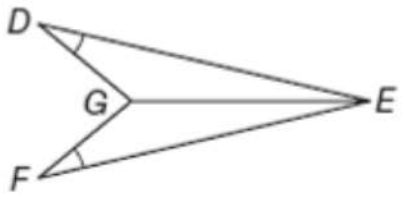
Given: $\overline{DE} \parallel \overline{FG}$
$\angle E \cong \angle G$

Prove: $\Delta DFG \cong \Delta FDE$



Given: $\angle D \cong \angle F$
$\overline{GE}$ *bisects* $\angle DEF$

Prove: $\overline{DG} \cong \overline{FG}$



Given: $\overline{AB} \cong \overline{CB}$

$\angle A \cong \angle C$

$\overline{BD}$ *bisects* $\angle ABC$

Prove: $\overline{AD} \cong \overline{CD}$