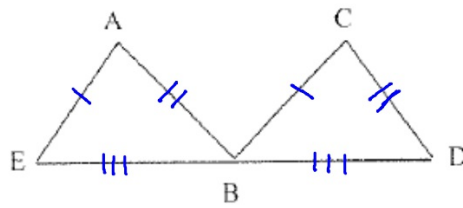


1. Given: $\overline{AE} \cong \overline{CB}$, $\overline{AB} \cong \overline{CD}$,
and B is the midpoint of \overline{ED}

Prove: $\triangle AEB \cong \triangle CBD$

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



statements

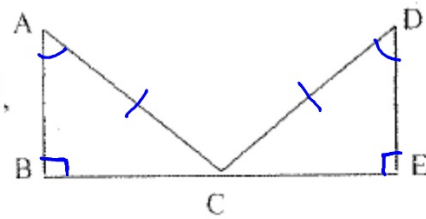
1. $\overline{AE} \cong \overline{CB}$, $\overline{AB} \cong \overline{CD}$,
and B is the midpoint of \overline{ED}
2. $\overline{EB} \cong \overline{DB}$
3. $\triangle AEB \cong \triangle CBD$

reasons

1. Given
2. Definition of Midpoint
3. SSS

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

Prove: $\triangle ABC \cong \triangle DEC$



statements

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

reasons

1. Given
2. Definition of \perp lines
3. All Right \angle 's \cong
4. AAS

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

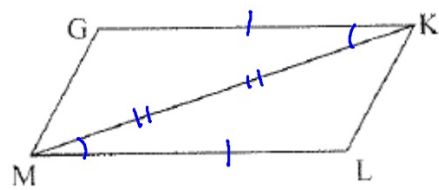
Prove: $\triangle GKM \cong \triangle LMK$

statements

1. $\overline{GK} \cong \overline{ML}$, $\angle GKM \cong \angle LMK$

2. $\overline{MK} \cong \overline{MK}$

3. $\triangle GKM \cong \triangle LMK$



reasons

1. Given

2. Reflexive Prop

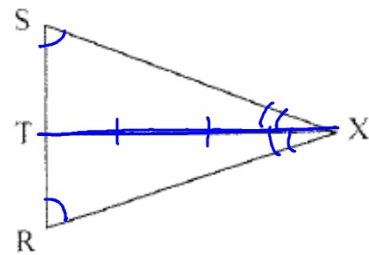
3. SAS

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

Prove: $\triangle SXT \cong \triangle RXT$

statements

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



reasons

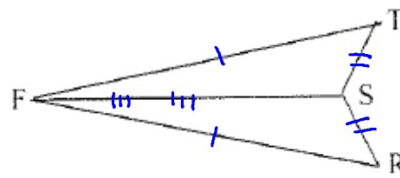
1. Given
2. Definition of Bisector
3. Reflexive prop
4. AAS

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

Prove: $\triangle FTS \cong \triangle FRS$

statements

1. $\overline{FT} \cong \overline{FR}$ and $\overline{ST} \cong \overline{SR}$
2. $\overline{FS} \cong \overline{FS}$
3. $\triangle FTS \cong \triangle FRS$



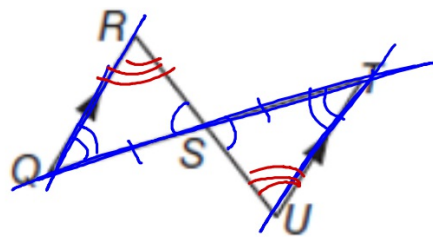
reasons

1. Given
2. Reflexive Property
3. SSS

Prove each of the following:

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

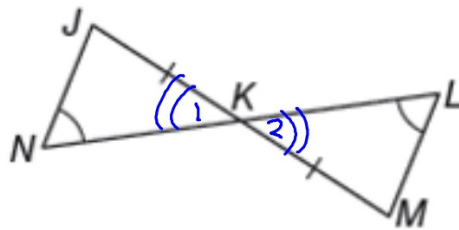
Prove $\triangle QSR \cong \triangle TSU$



Statement	Reason
1) S is midpt of \overline{QT} $\overline{QR} \parallel \overline{TU}$	1) Given
2) $\overline{QS} \cong \overline{TS}$	2) Definition of midpt
3) $\angle QSR \cong \angle TSU$	3) Vertical \angle 's \cong
4) $\angle Q \cong \angle T$	4) Alt Interior \angle 's \cong
5) $\triangle QSR \cong \triangle TSU$	5) ASA

Given: $\angle N \cong \angle L$
 $\overline{JK} \cong \overline{MK}$

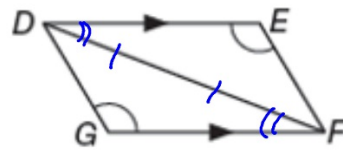
Prove: $\triangle JKN \cong \triangle MKL$



Statement	Reason
1) $\angle N \cong \angle L$ $\overline{JK} \cong \overline{MK}$	1) Given
2) $\angle JKN \cong \angle MKL$	2) Vertical \angle 's \cong
3) $\triangle JKN \cong \triangle MKL$	3) AAS

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

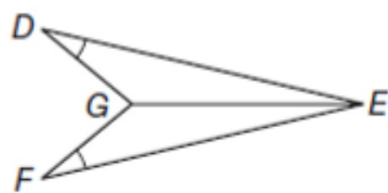
Prove: $\triangle DFG \cong \triangle FDE$



Statement	Reason
1) $\overline{DE} \parallel \overline{FG}, \angle E \cong \angle G$	1) Given
2) $\angle EDF \cong \angle GFD$	2) Alt Interior \angle 's \cong .
3) $\overline{DF} \cong \overline{DF}$	3) Reflexive Prop.
4) $\triangle DFG \cong \triangle FDE$	4) AAS

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

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



V.L

4.1 + 4.2

Due Thurs
11:00 pm

Given: $\overline{AB} \cong \overline{CB}$
 $\angle A \cong \angle C$
 \overline{BD} bisects $\angle ABC$

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

