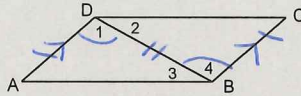


Advanced: Proving Triangles Congruent -

1. Given: $\overline{AD} \cong \overline{BC}$, $\overline{BC} \parallel \overline{AD}$
Prove: $\triangle ABD \cong \triangle CDB$



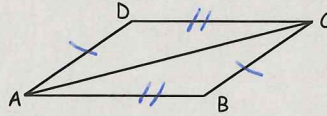
Statements

1. $\overline{AD} \cong \overline{BC}$, $\overline{BC} \parallel \overline{AD}$
2. $\overline{BD} \cong \overline{BD}$
3. $\angle 1 \cong \angle 4$
4. $\triangle ABD \cong \triangle CDB$

Reasons

1. given
2. reflexive
3. alt. int. \angle s are \cong
4. SAS

2. Given: $\overline{AD} \cong \overline{CB}$, $\overline{DC} \cong \overline{BA}$
Prove: $\triangle ABC \cong \triangle CDA$



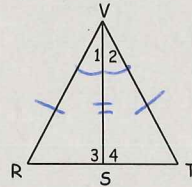
Statements

1. $\overline{AD} \cong \overline{CB}$, $\overline{DC} \cong \overline{BA}$
2. $\overline{AC} \cong \overline{AC}$
3. $\triangle ABC \cong \triangle CDA$

Reasons

1. given
2. reflexive
3. SSS

3. Given: $\overline{RV} \cong \overline{TV}$, \overline{VS} bisects $\angle RVT$
Prove: $\triangle RSV \cong \triangle TSV$



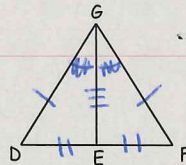
Statements

1. $\overline{RV} \cong \overline{TV}$, \overline{VS} bisects $\angle RVT$
2. $\angle 1 \cong \angle 2$
3. $\overline{VS} \cong \overline{VS}$
4. $\triangle RSV \cong \triangle TSV$

Reasons

1. given
2. def of bisects
3. reflexive
4. SAS

4. Given: \overline{GE} bisects \overline{DF} , $\overline{GD} \cong \overline{GF}$
Prove: $\triangle GDE \cong \triangle GFE$



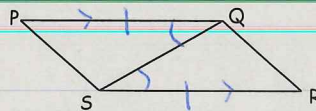
Statements

1. \overline{GE} bisects \overline{DF} , $\overline{GD} \cong \overline{GF}$
2. $\overline{DE} \cong \overline{EF}$
3. $\overline{GE} \cong \overline{GE}$
4. $\triangle GDE \cong \triangle GFE$

Reasons

1. given
2. def of bisects
3. reflexive
4. SSS

5. Given: $\overline{PQ} \parallel \overline{RS}$, $\overline{PO} \cong \overline{RO}$
Prove: $\triangle POS \cong \triangle RSO$



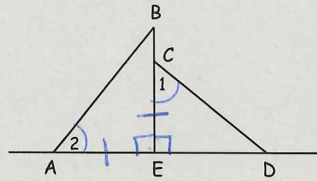
Statements

1. $\overline{PO} \cong \overline{RO}$, $\overline{PO} \parallel \overline{RO}$
2. $\angle POS \cong \angle RSO$
3. $\overline{SO} \cong \overline{SO}$
4. $\triangle POS \cong \triangle RSO$

Reasons

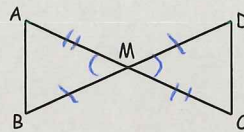
1. given
2. alt. int. \angle s are \cong
3. reflexive
4. SAS

6. Given: $\overline{AE} \cong \overline{CE}$, $\angle 1 \cong \angle 2$, $\overline{BE} \perp \overline{AD}$
 Prove: $\triangle AEB \cong \triangle CED$



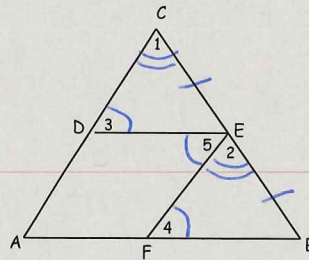
| Statements | Reasons |
|--|-------------------|
| 1. $\overline{AE} \cong \overline{CE}$, $\angle 1 \cong \angle 2$ | 1. given |
| 2. $\overline{BE} \perp \overline{AD}$ | 2. given |
| 3. $\angle AEB$ and $\angle CED$ are right angles | 3. def of \perp |
| 4. $\angle AEB \cong \angle CED$ | 4. substitution |
| 5. $\triangle AEB \cong \triangle CED$ | 5. ASA |

7. Given: \overline{AC} and \overline{BD} bisect each other at M
 Prove: $\triangle AMB \cong \triangle CMD$



| Statements | Reasons |
|--|------------------------------|
| 1. \overline{AC} and \overline{BD} bisect each other | 1. given |
| 2. $\overline{AM} \cong \overline{CM}$, $\overline{BM} \cong \overline{DM}$ | 2. def of bisects |
| 3. $\angle AMB \cong \angle CMD$ | 3. Vert. \angle 's \cong |
| 4. $\triangle AMB \cong \triangle CMD$ | 4. SAS |

8. Given: $\overline{DE} \parallel \overline{AB}$, $\overline{CA} \parallel \overline{EF}$,
 $\angle 1 \cong \angle 2$,
 E is the midpoint of \overline{BC}
 Prove: $\triangle CDE \cong \triangle EFB$

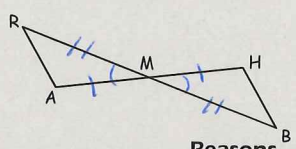


| Statements | Reasons |
|--|--|
| 1. $\overline{CA} \parallel \overline{EF}$ | 1. given |
| 2. $\angle 3 \cong \angle 5$ | 2. given alt int \angle s are \cong |
| 3. $\overline{DE} \parallel \overline{AB}$ | 3. given |
| 4. $\angle 5 \cong \angle 4$ | 4. alt int \angle s are \cong |
| 5. $\angle 3 \cong \angle 4$ | 5. substitution |
| 6. $\angle 1 \cong \angle 2$ | 6. Given |
| 7. E is the midpoint of \overline{BC} | 7. given |
| 8. $CE = EB$ | 8. def of midpt |
| 9. $\overline{CE} \cong \overline{EB}$ | 9. def. \cong segs. |
| 10. $\triangle CDE \cong \triangle EFB$ | 10. AAS |

Give a reason to support each statement.

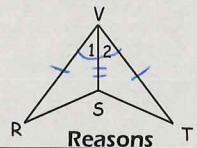
- linear pairs are suppl. 1. If $\angle A$ and $\angle B$ are a linear pair then $\angle A$ and $\angle B$ are supplementary.
 vertical \angle s are \cong 2. If $\angle A$ and $\angle C$ are vertical angles, then $\angle A \cong \angle C$.
 Subs/trans 3. If $m\angle 1 = m\angle 2$, and $m\angle 2 = m\angle 3$, then $m\angle 1 = m\angle 3$.
 Cpctc 4. If $\triangle ABF \cong \triangle CED$, then $\angle A \cong \angle C$.
 def of compl. 5. If $\angle A$ and $\angle D$ are complementary, then $m\angle A + m\angle D = 90$.
 angle addition 6. If T is in the interior of $\angle SRF$, then $m\angle SRT + m\angle TRF = m\angle SRF$.
 def of \angle bisector 7. If \overrightarrow{RT} bisects $\angle SRF$, then $m\angle SRT = m\angle TRF$.

8. Given: \overline{AH} and \overline{BR} bisect each other at M
 Prove: $\angle A \cong \angle H$



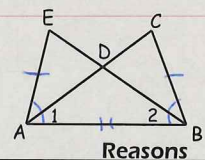
| Statements | Reasons |
|--|------------------------------------|
| 1. \overline{AH} and \overline{BR} bisect each other at M | 1. given |
| 2. $\overline{AM} \cong \overline{HM}$, $\overline{RM} \cong \overline{BM}$ | 2. def of bisect |
| 3. $\angle RMA \cong \angle BMH$ | 3. vertical \angle s are \cong |
| 4. $\triangle AMR \cong \triangle HMB$ | 4. SAS |
| 5. $\angle A \cong \angle H$ | 5. CPCTC |

9. Given: $\overline{RV} \cong \overline{VT}$, \overline{VS} bisects $\angle RVT$
 Prove: $\overline{RS} \cong \overline{TS}$



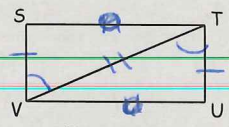
| Statements | Reasons |
|---|------------------|
| 1. $\overline{RV} \cong \overline{VT}$, \overline{VS} bisects $\angle RVT$ | 1. given |
| 2. $\angle 1 \cong \angle 2$ | 2. def of bisect |
| 3. $\overline{VS} \cong \overline{VS}$ | 3. reflexive |
| 4. $\triangle RSV \cong \triangle TSV$ | 4. SAS |
| 5. $\overline{RS} \cong \overline{TS}$ | 5. CPCTC |

10. Given: $\overline{AE} \cong \overline{BC}$, $\angle EAB \cong \angle CBA$
 Prove: $\angle 1 \cong \angle 2$



| Statements | Reasons |
|--|--------------|
| 1. $\overline{AE} \cong \overline{BC}$, $\angle EAB \cong \angle CBA$ | 1. given |
| 2. $\overline{AB} \cong \overline{AB}$ | 2. reflexive |
| 3. $\triangle ABC \cong \triangle BAE$ | 3. SAS |
| 4. $\angle 1 \cong \angle 2$ | 4. CPCTC |

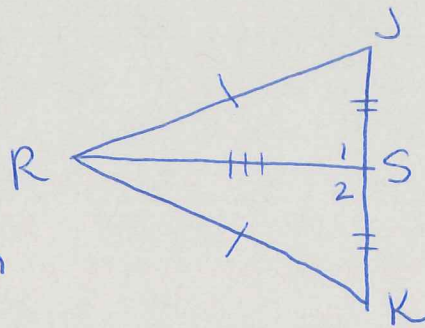
11. Given: $\angle SVT \cong \angle UTV$, $\overline{SV} \cong \overline{UT}$
 Prove: $\angle STV \cong \angle UVT$



| Statements | Reasons |
|--|--------------|
| 1. $\angle SVT \cong \angle UTV$ | 1. given |
| 2. $\overline{SV} \cong \overline{UT}$ | 2. Given |
| 3. $\overline{VT} \cong \overline{VT}$ | 3. reflexive |
| 4. $\triangle SVT \cong \triangle UTV$ | 4. SAS |
| 5. $\angle STV \cong \angle UVT$ | 5. CPCTC |

1. Given: $RJ \cong RK$, $SJ \cong SK$

Prove: $\triangle RSJ \cong \triangle RSK$



1. $RJ \cong RK$, $SJ \cong SK$

1. given

2. $RS \cong RS$

2. reflexive

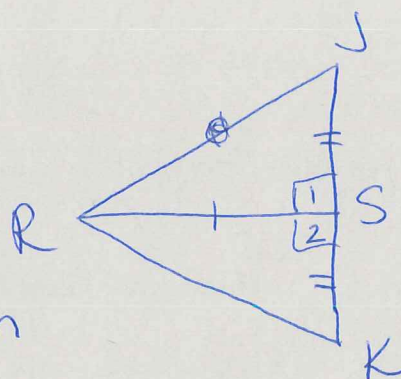
3. $\triangle RSJ \cong \triangle RSK$

3. SSS

2. Given: $\angle 1$ and $\angle 2$ are right angles

$JS \cong KS$

Prove: $\triangle RSJ \cong \triangle RSK$



1. $\angle 1$ and $\angle 2$ are right angles

1. given

$JS \cong KS$

1.5 $\angle 1 = 90^\circ$, $\angle 2 = 90^\circ$

1.5 def of Right \angle

2. $\angle 1 \cong \angle 2$

2. substitution

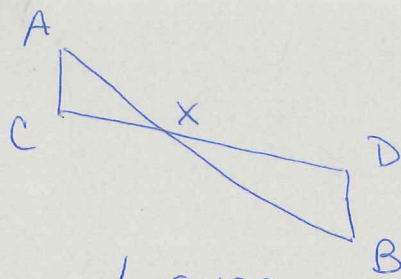
3. $RS \cong RS$

3. reflexive

4. $\triangle RSJ \cong \triangle RSK$

4. SAS

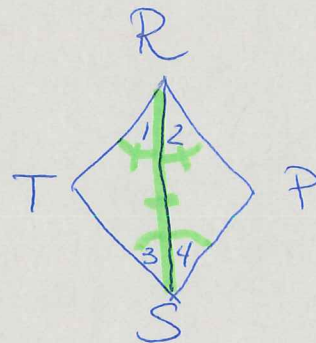
3. Given: AB & CD bisect each other
 Prove: $\triangle AXC \cong \triangle BXD$



1. AB & CD bisect each other
2. $AX \cong XB$
 $CX \cong XD$
3. $\angle AXC \cong \angle DXB$
4. $\triangle AXC \cong \triangle BXD$

1. given
2. def of bisect
3. vertical angles are \cong
4. SAS

4. Given: $\angle 3 \cong \angle 4$, RS bisects $\angle TRP$
 Prove: $\triangle RST \cong \triangle RSP$

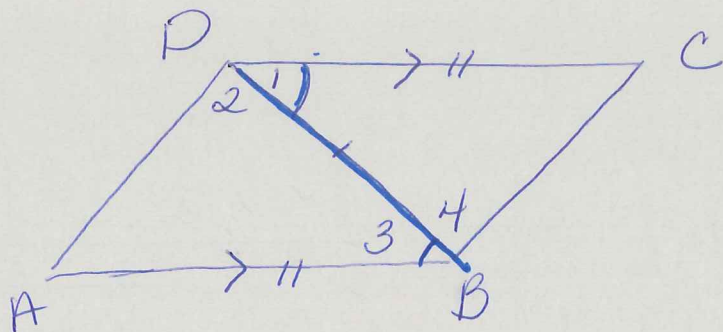


1. $\angle 3 \cong \angle 4$
 RS bisects $\angle TRP$
2. $\angle 1 \cong \angle 2$
3. $RS \cong RS$
4. $\triangle RST \cong \triangle RSP$

1. given
2. def of bisects
3. reflexive
4. ASA

5.) Given: $AB \cong CD$
 $AB \parallel CD$

Prove: $\triangle ABD \cong \triangle CDB$



1. $AB \cong CD, AB \parallel CD$

2. $\angle 3 \cong \angle 1$

3. $BD \cong BD$

4. $\triangle ABD \cong \triangle CDB$

1. given

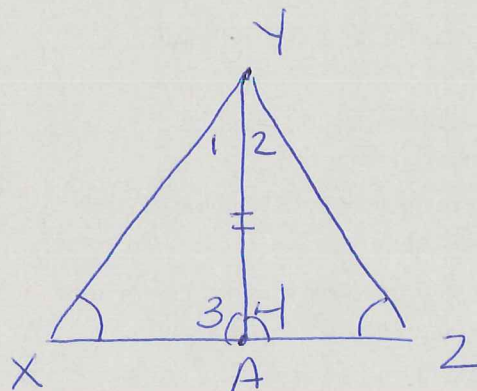
2. alt. interior \angle s are \cong

3. reflexive

4. SAS

6.) Given: $\angle X \cong \angle Z$
 $\angle 3 \cong \angle 4$

Prove: $\triangle XYA \cong \triangle ZYA$



1. $\angle X \cong \angle Z, \angle 3 \cong \angle 4$

2. ~~XYA~~ $YA \cong YA$

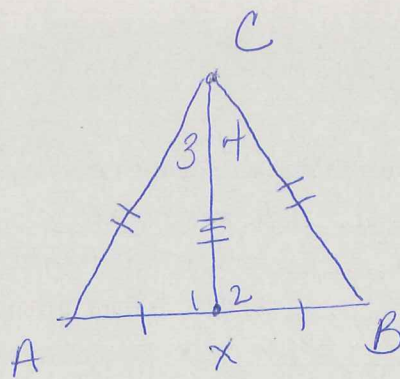
3. $\triangle XYA \cong \triangle ZYA$

1. given

2. Reflexive

3. AAS

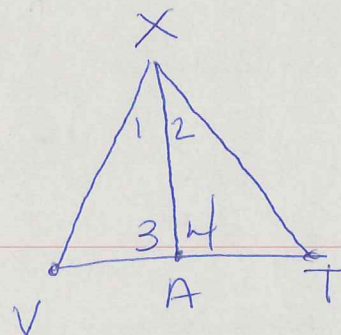
7.) Given: $AC \cong BC$
 X is midpt of AB
 Prove: $\triangle ACX \cong \triangle BCX$



1. $AC \cong BC$
 X is midpt of AB
2. $AX \cong XB$
3. $XC \cong XC$
4. $\triangle ACX \cong \triangle BCX$

1. given
2. def of midpt
3. Reflexive
4. SSS

8.) Given: $AX \perp VT$
 $\angle 1 \cong \angle 2$
 Prove: $\triangle VXA \cong \triangle TXA$

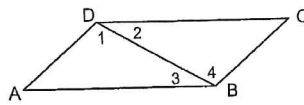


1. $AX \perp VT$, $\angle 1 \cong \angle 2$
2. $\angle 3 = 90^\circ$, $\angle 4 = 90^\circ$
3. $\angle 3 \cong \angle 4$
4. $XA \cong XA$
5. $\triangle VXA \cong \triangle TXA$

1. given
2. def of \perp
3. substitution
4. Reflexive
5. ASA

Proving Triangles Congruent

1. Given: $\overline{AD} \cong \overline{BC}$, $\overline{BC} \parallel \overline{AD}$
 Prove: $\triangle ABD \cong \triangle CDB$



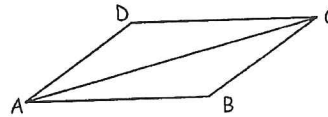
Statements

1. $\overline{AD} \cong \overline{BC}$, $\overline{BC} \parallel \overline{AD}$
2. $\overline{BD} \cong \overline{BD}$
3. $\angle 1 \cong \angle 4$
4. $\triangle ABD \cong \triangle CDB$

Reasons

1. _____
2. _____
3. _____
4. _____

2. Given: $\overline{AD} \cong \overline{CB}$, $\overline{DC} \cong \overline{BA}$
 Prove: $\triangle ABC \cong \triangle CDA$



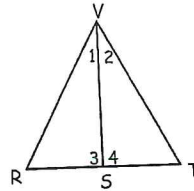
Statements

1. $\overline{AD} \cong \overline{CB}$, $\overline{DC} \cong \overline{BA}$
2. $\overline{AC} \cong \overline{AC}$
3. $\triangle ABC \cong \triangle CDA$

Reasons

1. _____
2. _____
3. _____

3. Given: $\overline{RV} \cong \overline{TV}$, \overline{VS} bisects $\angle RVT$
 Prove: $\triangle RSV \cong \triangle TSV$



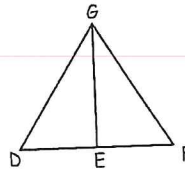
Statements

1. $\overline{RV} \cong \overline{TV}$, \overline{VS} bisects $\angle RVT$
2. $\angle 1 \cong \angle 2$
3. $\overline{VS} \cong \overline{VS}$
4. $\triangle RSV \cong \triangle TSV$

Reasons

1. _____
2. _____
3. _____
4. _____

4. Given: \overline{GE} bisects \overline{DF} , $\overline{GD} \cong \overline{GF}$
 Prove: $\triangle GDE \cong \triangle GFE$



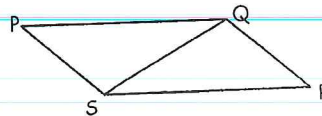
Statements

1. \overline{GE} bisects \overline{DF} , $\overline{GD} \cong \overline{GF}$
2. $\overline{DE} \cong \overline{EF}$
3. $\overline{GE} \cong \overline{GE}$
4. $\triangle GDE \cong \triangle GFE$

Reasons

1. _____
2. _____
3. _____
4. _____

5. Given: $\overline{PQ} \parallel \overline{RS}$, $\overline{PQ} \cong \overline{RS}$
 Prove: $\triangle PQS \cong \triangle RSQ$



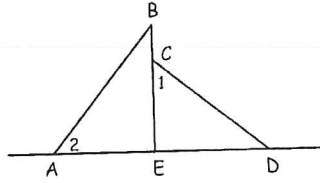
Statements

1. $\overline{PQ} \cong \overline{RS}$, $\overline{PQ} \parallel \overline{RS}$
2. $\angle PQS \cong \angle RSQ$
3. $\overline{SQ} \cong \overline{SQ}$
4. $\triangle PQS \cong \triangle RSQ$

Reasons

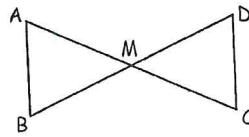
1. _____
2. _____
3. _____
4. _____

6. Given: $\overline{AE} \cong \overline{CE}$, $\angle 1 \cong \angle 2$, $\overline{BE} \perp \overline{AD}$
 Prove: $\triangle AEB \cong \triangle CED$



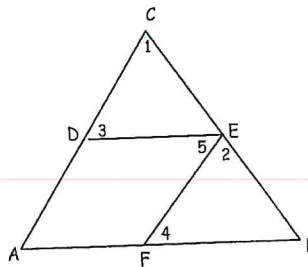
| Statements | Reasons |
|--|----------|
| 1. $\overline{AE} \cong \overline{CE}$, $\angle 1 \cong \angle 2$ | 1. _____ |
| 2. $\overline{BE} \perp \overline{AD}$ | 2. _____ |
| 3. $\angle AEB$ and $\angle CED$ are right angles | 3. _____ |
| 4. $\angle AEB \cong \angle CED$ | 4. _____ |
| 5. $\triangle AEB \cong \triangle CED$ | 5. _____ |

7. Given: \overline{AC} and \overline{BD} bisect each other at M
 Prove: $\triangle AMB \cong \triangle CMD$



| Statements | Reasons |
|--|------------------------------|
| 1. \overline{AC} and \overline{BD} bisect each other | 1. _____ |
| 2. $\overline{AM} \cong \overline{CM}$, $\overline{BM} \cong \overline{DM}$ | 2. _____ |
| 3. $\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$ | 3. Vert. \angle 's \cong |
| 4. $\triangle \underline{\hspace{1cm}} \cong \triangle \underline{\hspace{1cm}}$ | 4. _____ |

8. Given: $\overline{DE} \parallel \overline{AB}$, $\overline{CA} \parallel \overline{EF}$,
 $\angle 1 \cong \angle 2$,
 E is the midpoint of \overline{BC}
 Prove: $\triangle CDE \cong \triangle EFB$

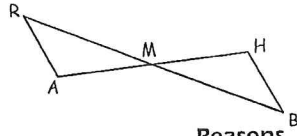


| Statements | Reasons |
|---|-----------------------|
| 1. $\overline{CA} \parallel \overline{EF}$ | 1. _____ |
| 2. $\angle 3 \cong \angle 5$ | 2. _____ |
| 3. $\overline{DE} \parallel \overline{AB}$ | 3. _____ |
| 4. $\angle 5 \cong \angle 4$ | 4. _____ |
| 5. $\angle 3 \cong \angle 4$ | 5. _____ |
| 6. $\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$ | 6. Given |
| 7. E is the midpoint of \overline{BC} | 7. _____ |
| 8. $CE = EB$ | 8. _____ |
| 9. $\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$ | 9. def. \cong segs. |
| 10. $\triangle \underline{\hspace{1cm}} \cong \triangle \underline{\hspace{1cm}}$ | 10. _____ |

Give a reason to support each statement.

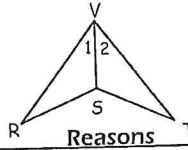
- _____ 1. If $\angle A$ and $\angle B$ are a linear pair then $\angle A$ and $\angle B$ are supplementary.
- _____ 2. If $\angle A$ and $\angle C$ are vertical angles, then $\angle A \cong \angle C$.
- _____ 3. If $m\angle 1 = m\angle 2$, and $m\angle 2 = m\angle 3$, then $m\angle 1 = m\angle 3$.
- _____ 4. If $\triangle ABF \cong \triangle CED$, then $\angle A \cong \angle C$.
- _____ 5. If $\angle A$ and $\angle D$ are complementary, then $m\angle A + m\angle D = 90$.
- _____ 6. If T is in the interior of $\angle SRF$, then $m\angle SRT + m\angle TRF = m\angle SRF$.
- _____ 7. If \vec{RT} bisects $\angle SRF$, then $m\angle SRT = m\angle TRF$.

8. Given: \overline{AH} and \overline{BR} bisect each other at M
 Prove: $\angle A \cong \angle H$



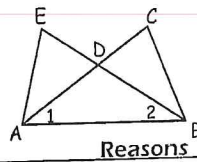
| Statements | Reasons |
|--|----------|
| 1. \overline{AH} and \overline{BR} bisect each other at M | 1. _____ |
| 2. $\overline{AM} \cong \overline{HM}$, $\overline{RM} \cong \overline{BM}$ | 2. _____ |
| 3. $\angle RMA \cong \angle BMH$ | 3. _____ |
| 4. $\triangle AMR \cong \triangle HMB$ | 4. _____ |
| 5. $\angle A \cong \angle H$ | 5. _____ |

9. Given: $\overline{RV} \cong \overline{VT}$, \overline{VS} bisects $\angle RVT$
 Prove: $\overline{RS} \cong \overline{TS}$



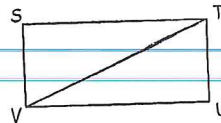
| Statements | Reasons |
|---|----------|
| 1. $\overline{RV} \cong \overline{VT}$, \overline{VS} bisects $\angle RVT$ | 1. _____ |
| 2. $\angle 1 \cong \angle 2$ | 2. _____ |
| 3. $\overline{VS} \cong \overline{VS}$ | 3. _____ |
| 4. $\triangle RSV \cong \triangle TSV$ | 4. _____ |
| 5. $\overline{RS} \cong \overline{TS}$ | 5. _____ |

10. Given: $\overline{AE} \cong \overline{BC}$, $\angle EAB \cong \angle CBA$
 Prove: $\angle 1 \cong \angle 2$



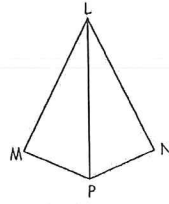
| Statements | Reasons |
|--|----------|
| 1. $\overline{AE} \cong \overline{BC}$, $\angle EAB \cong \angle CBA$ | 1. _____ |
| 2. $\overline{AB} \cong \overline{AB}$ | 2. _____ |
| 3. $\triangle ABC \cong \triangle BAE$ | 3. _____ |
| 4. $\angle 1 \cong \angle 2$ | 4. _____ |

11. Given: $\angle SVT \cong \angle UTV$, $\overline{SV} \cong \overline{UT}$
 Prove: $\angle STV \cong \angle UVT$



| Statements | Reasons |
|--|----------|
| 1. $\angle SVT \cong \angle UTV$ | 1. _____ |
| 2. _____ \cong _____ | 2. Given |
| 3. $\overline{VT} \cong \overline{VT}$ | 3. _____ |
| 4. $\triangle SVT \cong \triangle UTV$ | 4. _____ |
| 5. $\angle STV \cong \angle UVT$ | 5. _____ |

12. Given: \overline{LP} bisects $\angle MLN$,
 $\overline{PM} \perp \overline{LM}$, $\overline{PN} \perp \overline{LN}$
 Prove: $\overline{PM} \cong \overline{PN}$

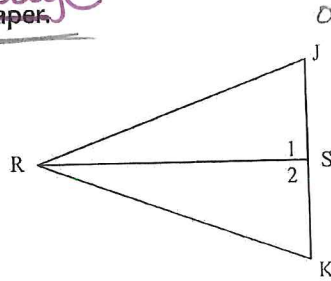


| Statements | Reasons |
|--|--------------|
| 1. \overline{LP} bisects $\angle MLN$ | 1. _____ |
| 2. $\angle NLP \cong \angle MLP$ | 2. _____ |
| 3. $\overline{PM} \perp \overline{LM}$, $\overline{PN} \perp \overline{LN}$ | 3. _____ |
| 4. $\angle LMP$ and $\angle LNP$ are right angles | 4. _____ |
| 5. $\angle LMP \cong \angle LNP$ | 5. _____ |
| 6. _____ \cong _____ | 6. Reflexive |
| 7. $\triangle LMP \cong \triangle LNP$ | 7. _____ |
| 8. $\overline{PM} \cong \overline{PN}$ | 8. _____ |

Writing Two Column Proofs

Write a two column proof for each. *Next page*
Use notebook paper.

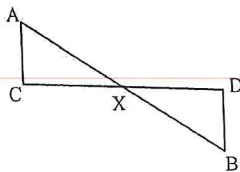
1. Given: $\overline{RJ} \cong \overline{RK}$, $\overline{SJ} \cong \overline{SK}$
 Prove: $\triangle RSJ \cong \triangle RSK$



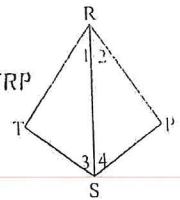
Problems # 1 and 2

2. Given: $\angle 1$ and $\angle 2$ are right angles, $\overline{JS} \cong \overline{KS}$
 Prove: $\triangle RSJ \cong \triangle RSK$

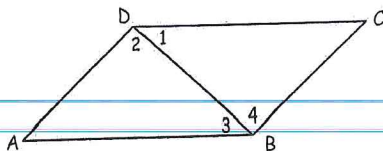
3. Given: \overline{AB} and \overline{CD} bisect each other
 Prove: $\triangle AXC \cong \triangle BXD$



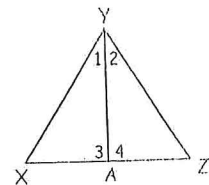
4. Given: $\angle 3 \cong \angle 4$, \overline{RS} bisects $\angle TRP$
 Prove: $\triangle RST \cong \triangle RSP$



5. Given: $\overline{AB} \cong \overline{CD}$,
 $\overline{AB} \parallel \overline{CD}$
 Prove: $\triangle ABD \cong \triangle CDB$

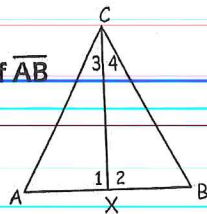


6. Given: $\angle X \cong \angle Z$,
 $\angle 3 \cong \angle 4$
 Prove: $\triangle XYA \cong \triangle ZYA$
 $\overline{XA} \cong \overline{AZ}$



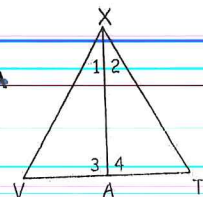
7. Given: $\overline{AC} \cong \overline{BC}$,
 X is the midpoint of \overline{AB}
 Prove: $\triangle ACX \cong \triangle BCX$

$\angle 3 \cong \angle 4$



8. Given: $\overline{AX} \perp \overline{VT}$,
 $\angle 1 \cong \angle 2$
 Prove: $\triangle VXA \cong \triangle TXA$

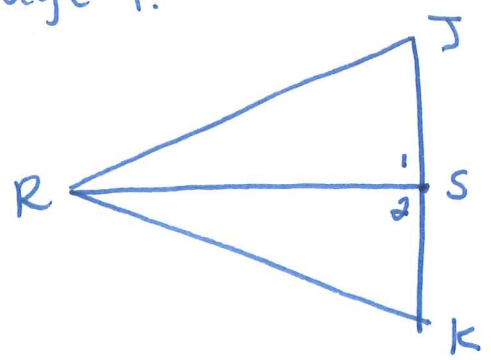
$\angle V \cong \angle T$



Look at questions on Page 4.

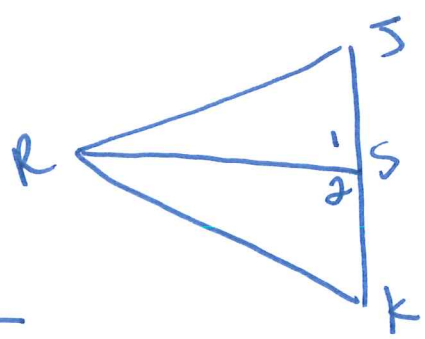
1.

| | |
|------------------|----------|
| 1. _____ | 1. _____ |
| 2. $RS \cong RS$ | 2. _____ |
| 3. _____ | 3. _____ |



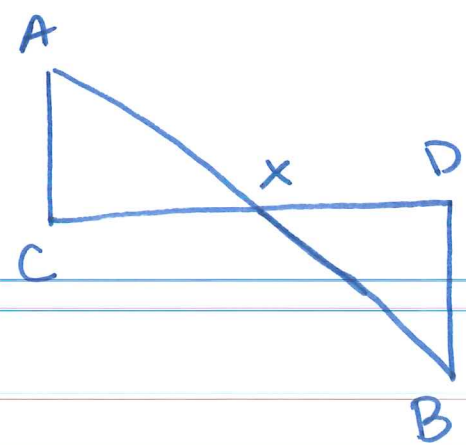
2.

| | |
|--|----------|
| 1. _____ | 1. _____ |
| 2. $\angle 1 \cong \angle 2$ | 2. _____ |
| 3. $RS \cong RS$ | 3. _____ |
| 4. $\triangle RSJ \cong \triangle$ _____ | 4. _____ |



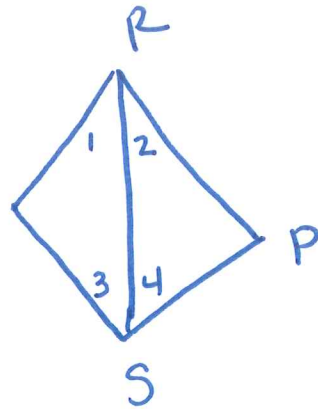
3.

| | |
|---|----------|
| 1. _____ | 1. _____ |
| 2. $AX \cong XB$ $CX \cong XD$ | 2. _____ |
| 3. $\angle AXC \cong \angle DXB$ | 3. _____ |
| 4. $\triangle AXC \cong \triangle B XD$ | 4. _____ |



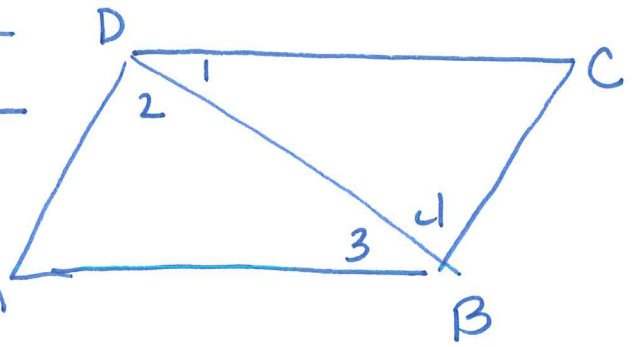
4

- | | |
|----------------------------------|------------|
| 1. _____ | 1. _____ |
| 2. $\angle 1 \cong \angle 2$ | 2. _____ T |
| 3. $RS \cong RS$ | 3. _____ |
| 4. $\Delta RST \cong \Delta RSP$ | 4. _____ |



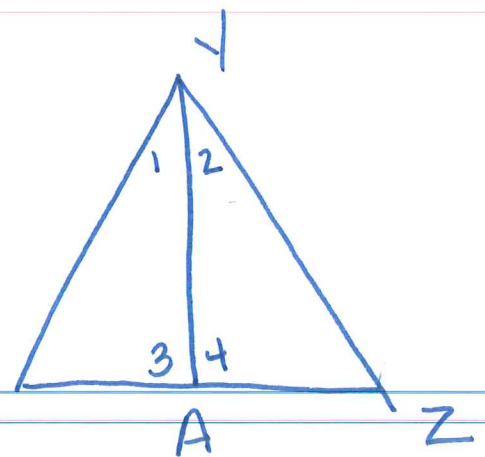
5.

- | | |
|------------------------------------|----------------|
| 1. _____ | 1. _____ |
| 2. $\angle 3 \cong \angle 1$ | 2. _____ |
| 3. _____ | 3. Reflexive A |
| 4. $\Delta ABD \cong \Delta$ _____ | 4. _____ |

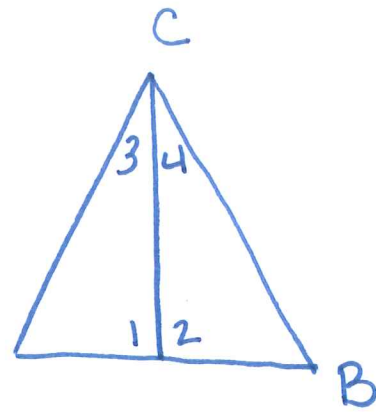


6.

- | | |
|------------------------------------|------------|
| 1. _____ | 1. _____ |
| 2. $AY \cong AY$ | 2. _____ |
| 3. $\Delta XYA \cong \Delta$ _____ | 3. _____ X |
| 4. _____ | 4. _____ |



7. _____
- | | |
|--|------------|
| 1. _____ | 1. _____ |
| 2. $AX \cong XB$ | 2. _____ |
| 3. $XC \cong XC$ | 3. _____ A |
| 4. $\triangle ACX \cong \triangle$ _____ | 4. _____ |
| 5. $\angle 3 \cong \angle 4$ | 5. _____ |



- 8.) _____
- | | |
|---|-----------------|
| 1. _____ | 1. _____ |
| 2. $\angle 3 = 90^\circ, \angle 4 = 90^\circ$ | 2. def of _____ |
| 3. $\angle 3 \cong \angle 4$ | 3. _____ |
| 4. $XA \cong XA$ | 4. _____ V |
| 5. $\triangle VXA \cong \triangle$ _____ | 5. _____ |
| 6. $\angle V \cong \angle T$ | 6. _____ |

