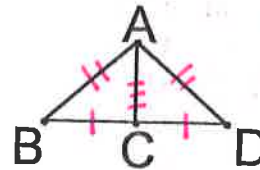
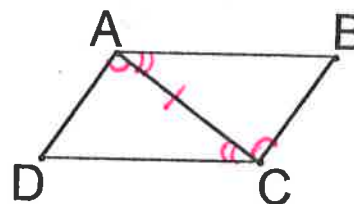


**#1** Given:  $C$  is the midpoint of  $\overline{BD}$   
 $\overline{AB} \cong \overline{AD}$   
 Prove:  $\triangle ABC \cong \triangle ADC$



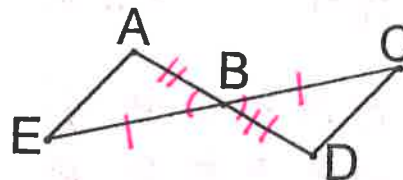
STATEMENTS	REASONS
1) $C$ is the midpoint of $\overline{BD}$	1) Given
2) $\overline{AB} \cong \overline{AD}$	2) Given
3) $\overline{BC} \cong \overline{CD}$	3) Def. of midpoint
4) $\overline{AC} \cong \overline{AC}$	4) Reflexive
5) $\triangle ABC \cong \triangle ADC$	5) SSS

**#2** Given:  $\overline{AB} \parallel \overline{DC}$   
 $\overline{AD} \parallel \overline{BC}$   
 Prove:  $\angle ABC \cong \angle CDA$



STATEMENTS	REASONS
1) $\overline{AB} \parallel \overline{DC}$ , $\overline{AD} \parallel \overline{BC}$	1) Given
2) $\angle DAC \cong \angle BCA$	2) Alt. Int. Angles $\cong$
3) $\angle BAC \cong \angle DCA$	3) Alt. Int. Angles $\cong$
4) $\overline{AC} \cong \overline{AC}$	4) Reflexive
5) $\triangle ABC \cong \triangle CDA$	5) ASA
6) $\angle ABC \cong \angle CDA$	6) CPCTC

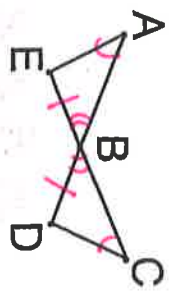
**#3** Given:  $\overline{AD}$  bisects  $\overline{EC}$   
 $\overline{EC}$  bisects  $\overline{AD}$   
 Prove:  $\triangle ABE \cong \triangle DBC$



STATEMENTS	REASONS
1) $\overline{AD}$ bisects $\overline{EC}$ $\overline{EC}$ bisects $\overline{AD}$	1) Given
2) $\overline{AB} \cong \overline{BD}$ , $\overline{EB} \cong \overline{BC}$	2) def. of bisector
3) $\angle ABE \cong \angle CBD$	3) vertical $\angle$ 's $\cong$
4) $\triangle ABE \cong \triangle DBC$	4) SAS

#4

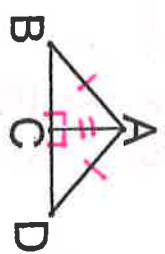
Given:  $\angle A \cong \angle C$   
 $\overline{BE} \cong \overline{BD}$   
 Prove:  $\triangle ABE \cong \triangle CBD$



STATEMENTS	REASONS
1) $\angle A \cong \angle C$	1) Given
2) $\overline{BE} \cong \overline{BD}$	2) Given
3) $\angle ABE \cong \angle CBD$	3) Vertical $\angle$ 's $\cong$
4) $\triangle ABE \cong \triangle CBD$	4) AAS

#5

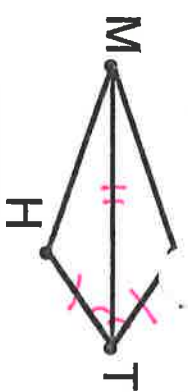
Given:  $\triangle ABC, \triangle ADC$  right  $\triangle$ s  
 $\overline{AB} \cong \overline{AD}$   
 Prove:  $\triangle ABC \cong \triangle ADC$



STATEMENTS	REASONS
1) $\triangle ABC, \triangle ADC$ right $\triangle$ s	1) Given
2) $\overline{AB} \cong \overline{AD}$	2) Given
3) $\overline{AC} \cong \overline{AC}$	3) Reflexive
4) $\triangle ABC \cong \triangle ADC$	4) HL

#6

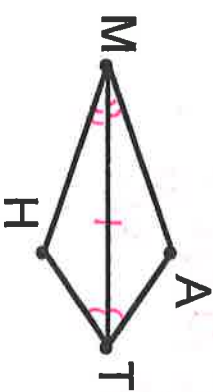
Given:  $\overline{AT} \cong \overline{HT}$   
 $\angle ATM \cong \angle HTM$   
 Prove:  $\triangle MAT \cong \triangle MHT$



STATEMENTS	REASONS
1) $\overline{AT} \cong \overline{HT}$	1) Given
2) $\angle ATM \cong \angle HTM$	2) Given
3) $\overline{MT} \cong \overline{MT}$	3) Reflexive
4) $\triangle MAT \cong \triangle MHT$	4) SAS
5) $\angle MAT \cong \angle MHT$	5) CPCTC

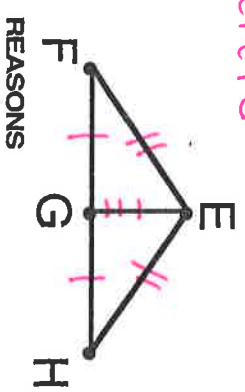
#7

Given:  $\overline{MT}$  bisects  $\angle AMH$   
 $\overline{MT}$  bisects  $\angle ATH$   
 Prove:  $\triangle MAT \cong \triangle MHT$



STATEMENTS	REASONS
1) $\overline{MT}$ bisects $\angle AMH$ $\overline{MT}$ bisects $\angle ATH$	1) Given
2) $\angle AMT \cong \angle HMT$	2) def of bisector
3) $\angle ATM \cong \angle HTM$	3) def of bisector
4) $\overline{MT} \cong \overline{MT}$	4) Reflexive
5) $\triangle MAT \cong \triangle MHT$	5) ASA
6) $\angle MAT \cong \angle MHT$	6) CPCTC

Given: G is the midpoint of  $\overline{FH}$   
 $\overline{EF} \cong \overline{EH}$   
 Prove:  $\triangle FGE \cong \triangle HGE$



STATEMENTS	REASONS
1) G is the midpoint of $\overline{FH}$	1) Given
2) $\overline{EF} \cong \overline{EH}$	2) Given
3) $\overline{FG} \cong \overline{GH}$	3) def. of midpoint
4) $\overline{EG} \cong \overline{EG}$	4) Reflexive
5) $\triangle FGE \cong \triangle HGE$	5) SSS
6) $\angle FGE \cong \angle HGE$	6) CPCTC

#8