

AM Geometry

S	R
1. $\overline{AB} \cong \overline{CD}$ $\overline{BC} \cong \overline{DA}$	1. Given
2. $\overline{AC} \cong \overline{AC}$	2. reflexive
3. $\triangle ABC \cong \triangle CDA$	SSS

S	R
$\overline{AB} \cong \overline{CB}$ $\overline{EB} \cong \overline{DB}$	Given Vertical
$\angle ABE \cong \angle CBD$	reflexive
$\triangle ABE \cong \triangle CBD$	SAS

S	R
$\angle XWY \cong \angle ZWY$ $\angle XYW \cong \angle ZYW$	Given
$\overline{WY} \cong \overline{WY}$	reflexive
$\triangle WXZ \cong \triangle WYZ$	ASA

S	R
$\overline{AB} \cong \overline{CB}$ $\overline{EB} \cong \overline{DB}$	Given
$\angle ABE \cong \angle CBD$	Vertical \angle s
$\triangle ABC \cong \triangle CBD$	SAS

S	R
$\angle A \cong \angle C$ $\overline{AB} \cong \overline{CB}$	Given
$\angle ABE \cong \angle CBD$	Vertical \angle s
$\triangle ABE \cong \triangle CBD$	ASA

S	R
\overline{AD} bisects \overline{EC} $\overline{EB} \cong \overline{ED}$	Given
$\overline{AB} \cong \overline{BD}$	def. of bisector
$\angle ABE \cong \angle CBD$	vert. \angle s
$\triangle ABE \cong \triangle CBD$	SAS

S	R
$\overline{AT} \cong \overline{HT}$ $\angle ATM \cong \angle HTM$	Given
$\overline{MT} \cong \overline{MT}$	reflexive
$\triangle MAT \cong \triangle MHT$	SAS

S	R
\overline{MT} bisects $\angle AMH$ \overline{MT} bisects $\angle ATH$	Given
$\overline{MT} \cong \overline{MT}$	reflexive
$\triangle MAT \cong \triangle MHT$	ASA

S	R
G is the midpt. of \overline{FH} $\overline{FG} \cong \overline{GH}$	Given
$\overline{EG} \cong \overline{EG}$	reflexive
$\overline{FE} \cong \overline{EH}$	def. of midpt.
$\triangle FGE \cong \triangle HGE$	SSS

S	R
\overline{EG} bisects $\angle FEH$, $\overline{FG} \cong \overline{GH}$	Given
$\overline{EG} \cong \overline{EG}$	reflexive
$\triangle FGE \cong \triangle HGE$	SAS

