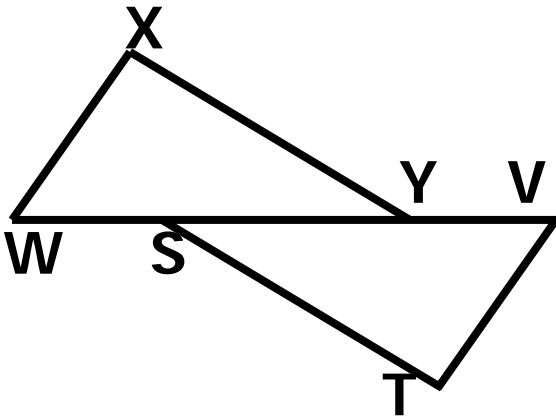


Proof ONE



Given:

$$\angle SVT \cong \angle YWX$$

$$\angle XYW \cong \angle TSV$$

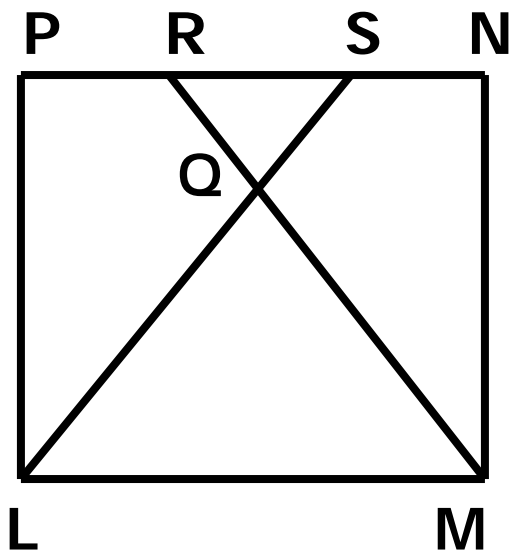
$$\overline{WS} \cong \overline{VY}$$

Prove:

$$\triangle WXY \cong \triangle VTS$$

$\angle SVT \cong \angle YWX$	Given
$\angle XYW \cong \angle TSV$	Given
$\overline{WS} \cong \overline{VY}$	Given
$\overline{SY} \cong \overline{SY}$	Reflexive Property
$\overline{WY} \cong \overline{VS}$	Addition Postulate
$\triangle WXY \cong \triangle VTS$	ASA

Proof TWO



Given:

$$\overline{LP} \perp \overline{PN}$$

$$\overline{MN} \perp \overline{PN}$$

$$\overline{PR} \cong \overline{NS}$$

$$\overline{LP} \cong \overline{NM}$$

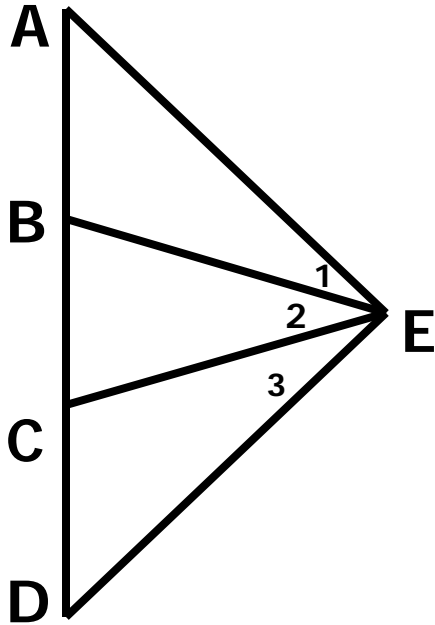
Prove:

$$\triangle PLS \cong \triangle NMR$$

$\overline{LP} \cong \overline{MN}$	Given
$\overline{PR} \cong \overline{NS}$	Given
$\overline{RS} \cong \overline{RS}$	Reflexive Property
$\overline{PR} + \overline{RS} \cong \overline{NS} + \overline{SR}$	Addition Postulate
$\overline{PS} \cong \overline{NR}$	Substitution Postulate

$\overline{LP} \perp \overline{PN}$	Given
$\overline{MN} \perp \overline{PN}$	Given
$\sphericalangle LPS$ and $\sphericalangle MNP$ are right \sphericalangle s	Definition of <i>perpendicular</i>
$\sphericalangle LPS \cong \sphericalangle MNP$	Right \sphericalangle s are congruent
$\triangle PLS \cong \triangle NMR$	SAS

Proof THREE



Given :

$$\sphericalangle 1 \cong \sphericalangle 2$$

$$\sphericalangle 2 \cong \sphericalangle 3$$

$$\overline{EB} \cong \overline{EC}$$

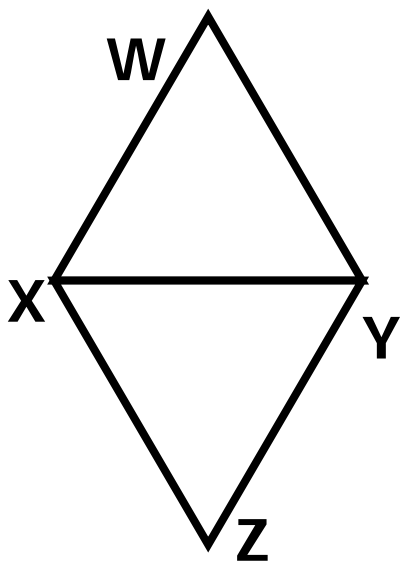
$$\overline{AE} \cong \overline{DE}$$

Prove:

$$\triangle AEB \cong \triangle DEC$$

$\sphericalangle 1 \cong \sphericalangle 2$	Given
$\sphericalangle 2 \cong \sphericalangle 3$	Given
$\sphericalangle 1 \cong \sphericalangle 3$	Transitive Property
$\overline{EB} \cong \overline{EC}$	Given
$\overline{AE} \cong \overline{DE}$	Given
$\triangle AEB \cong \triangle DEC$	SAS

Proof FOUR



Given:

\overline{XY} bisects $\sphericalangle WXZ$

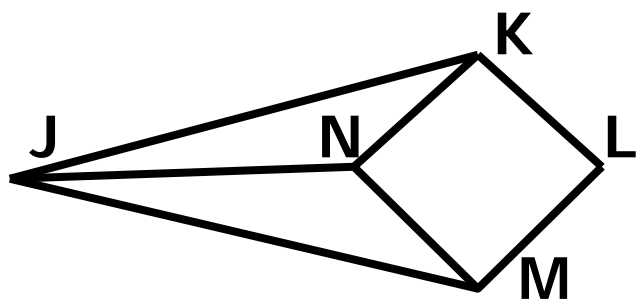
$\overline{WX} \cong \overline{ZX}$

Prove:

$\triangle WXY \cong \triangle ZXY$

\overline{XY} bisects $\sphericalangle WXZ$	Given
$\sphericalangle WXY \cong \sphericalangle ZXY$	Definition of \sphericalangle bisector
$\overline{XY} \cong \overline{XY}$	Reflexive Property
$\overline{WX} \cong \overline{ZX}$	Given
$\triangle WXY \cong \triangle ZXY$	SAS

Proof FIVE



Given:

$\square NKLM$ is a square

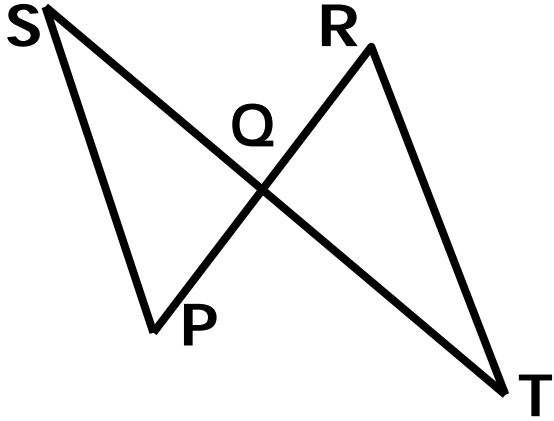
$$\overline{JK} \cong \overline{JM}$$

Prove:

$$\triangle JKN \cong \triangle JMN$$

$\square NKLM$ is a square	Given
$\overline{NM} \cong \overline{NK}$	All sides of a \square are \cong
$\overline{JN} \cong \overline{JN}$	Reflexive Property
$\overline{JK} \cong \overline{JM}$	Given
$\triangle JKN \cong \triangle JMN$	SSS

Proof SIX



Given:

Q is the midpoint of \overline{PR}

$\sphericalangle P \cong \sphericalangle R$

Prove:

$\triangle SPQ \cong \triangle TRQ$

Q is the midpoint of \overline{PR}	Given
$\overline{PQ} \cong \overline{RQ}$	Definition of <i>midpoint</i>
$\sphericalangle SQP \cong \sphericalangle TQR$	Vertical \sphericalangle s are \cong
$\sphericalangle P \cong \sphericalangle R$	Given
$\triangle SPQ \cong \triangle TRQ$	ASA