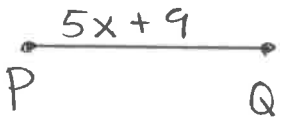
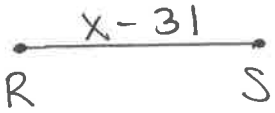
Given: $\overline{PQ} \cong \overline{RS}$

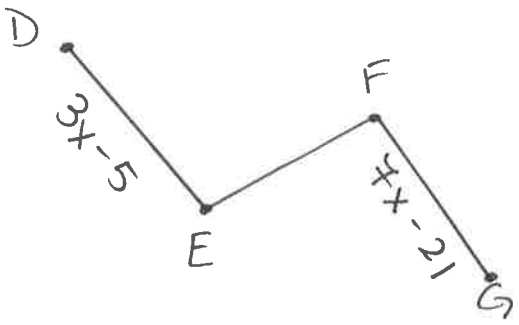
Prove: $X = -10$





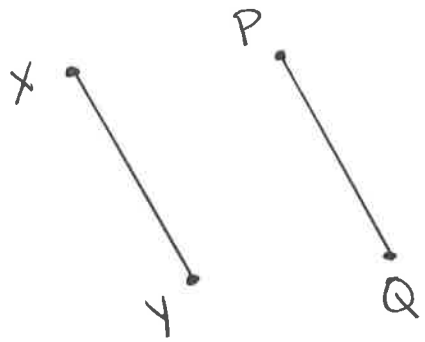
Given: $\overline{DE} \cong \overline{FG}$

Prove: $x = 4$



Given: $\overline{PQ} \cong \overline{XY}$

Prove: $\overline{XY} \cong \overline{PQ}$



Given: $\overline{EF}$

Prove: $\overline{EF} \cong EF$

Given: $\overline{AB} \cong \overline{QR}$

$\overline{QR} \cong \overline{ST}$

Prove: $\overline{AB} \cong \overline{ST}$

Given: $\overline{SR} \cong \overline{PZ}$

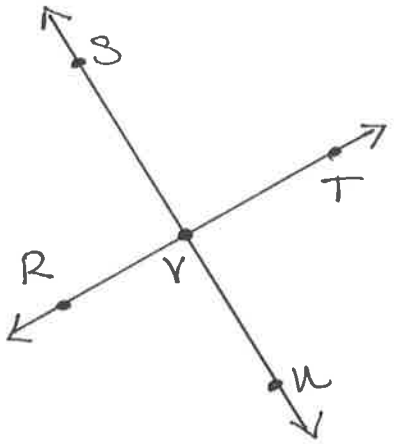
$\overline{PZ} \cong \overline{AC}$

$\overline{AC} \cong \overline{EG}$

Prove: $\overline{SR} \cong \overline{EG}$

Given: $\angle RVS \cong \angle SVT$.

Prove: $\overleftrightarrow{RT} \perp \overleftrightarrow{SU}$



Given: $AB = BC$

C is the midpoint of $\overline{BD}$

Prove: $AB = CD$

Given: $\overline{AB} \cong \overline{BC}$
C is the midpoint of $\overline{BD}$

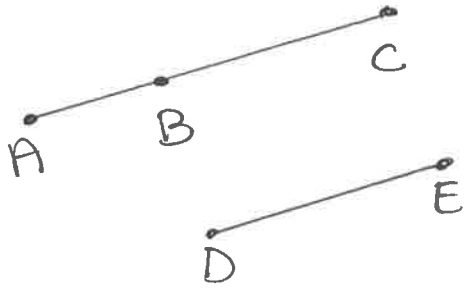
Prove: $\overline{AB} \cong \overline{CD}$

Given: B is the midpoint of $\overline{AC}$
C is the midpoint of $\overline{BD}$

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

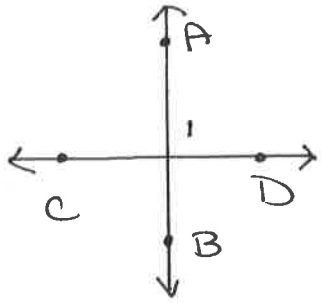
Given: $BC = DE$

Prove: $AB + DE = AC$

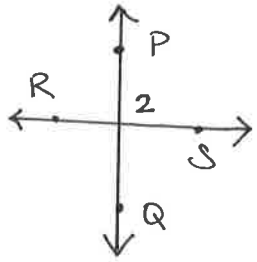


Given: $\overleftrightarrow{AB} \perp \overleftrightarrow{CD}$

$\overleftrightarrow{RS} \perp \overleftrightarrow{PQ}$



Prove: $\angle 1 \cong \angle 2$



Given : $AB = BC$

$BC = CD$

Prove: $AB = CD$

Given: $\overline{AB} \cong \overline{BC}$

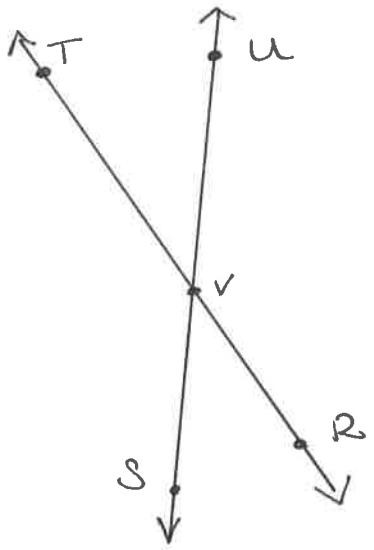
$\overline{BC} \cong \overline{CD}$

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

Given: $\overline{AB} \cong \overline{CD}$

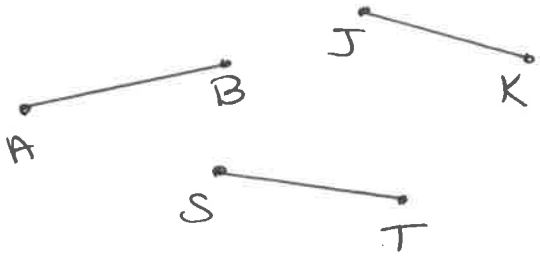
Prove: $\overline{AC} \cong \overline{BD}$

Prove: $\angle RVS \cong \angle TVU$



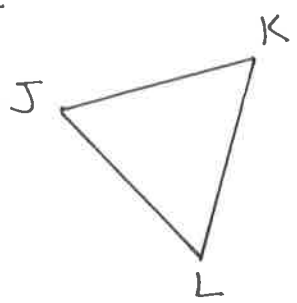
Given: $\overline{AB} \cong \overline{JK}$, $\overline{JK} \cong \overline{ST}$

Prove: $\overline{AB} \cong \overline{ST}$



Given: $LK = 5$, $JK = 5$, $\overline{JK} \cong \overline{JL}$

Prove: $\overline{LK} \cong \overline{JL}$



Given: $\overline{QR} \cong \overline{RS}$

Prove: $QS = 2RS$

Given: M is the midpoint of $\overline{AB}$.

Prove: $AB = 2AM$

Given: $\overline{WX} \cong \overline{XQ}$

Prove: $WX = \frac{1}{2} WQ$

Given: T is the midpoint of $\overline{AR}$

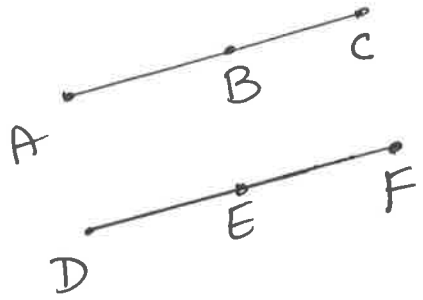
Prove: $AT = \frac{1}{2} AR$

Given: $\overline{AB} \cong \overline{DE}$

B is the midpoint of $\overline{AC}$.

E is the midpoint of $\overline{DF}$.

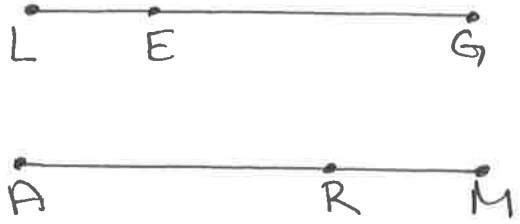
Prove: $\overline{BC} \cong \overline{EF}$



Given: $\overline{LE} \cong \overline{MR}$

$\overline{EG} \cong \overline{AR}$

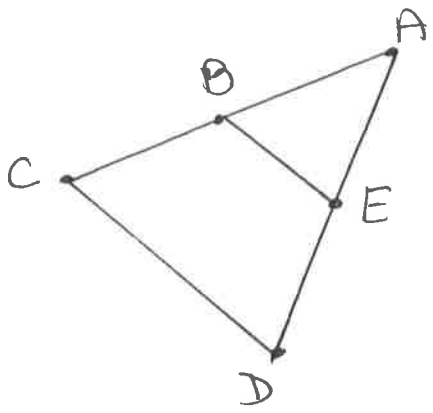
Prove: $\overline{LG} \cong \overline{MA}$



Given: $AC = AD$

$AB = AE$

Prove: $BC = ED$



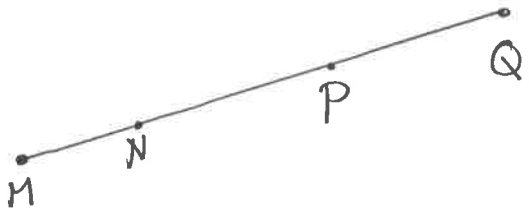
Given: G is the midpoint of $\overline{FH}$

$\overline{EF} \cong \overline{GH}$

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

Given: $\overline{MN} \cong \overline{PQ}$

Prove: $\overline{MP} \cong \overline{NQ}$

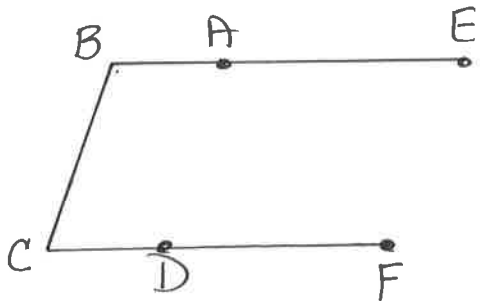


Given: $\angle 1$ and $\angle 2$ are right angles.

Prove: $\angle 1 \cong \angle 2$

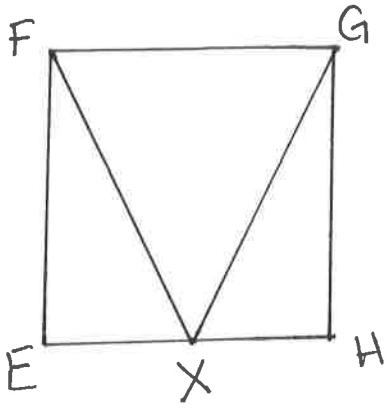
Given: $\overline{BH} \cong \overline{BC}$, $\overline{BC} \cong \overline{CD}$, $\overline{AE} \cong \overline{DF}$

Prove: $\overline{BE} \cong \overline{CF}$



Given: $\overline{EH} \cong \overline{GH}$, $\overline{FG} \cong \overline{GH}$

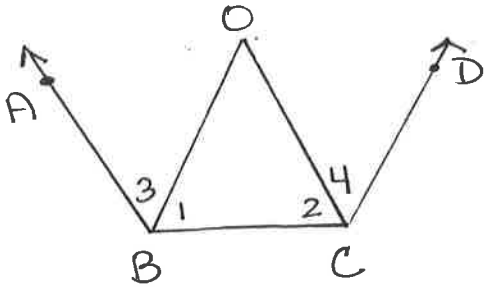
Prove: $\overline{FG} \cong \overline{EH}$



Given: $m\angle ABC = m\angle DBC$

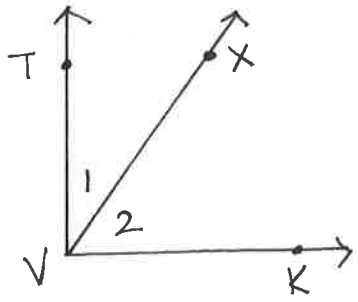
$m\angle 1 = m\angle 2$

Prove: $m\angle 3 = m\angle 4$



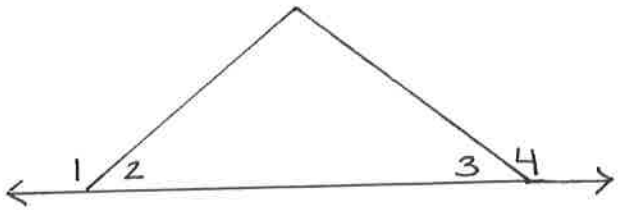
Given: $\angle TVK$ is a right angle.

Prove: $\angle 1$ is complementary to $\angle 2$.



Given: $\angle 1 \cong \angle 4$

Prove: $\angle 2 \cong \angle 3$

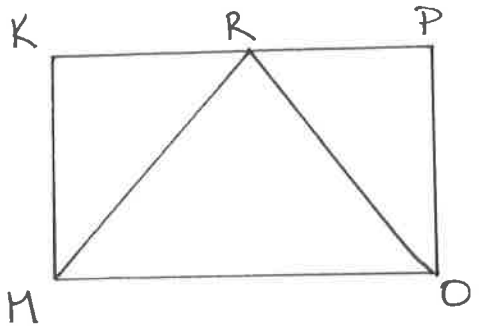


Given: $\overline{KM} \perp \overline{MO}$

$\overline{PO} \perp \overline{MO}$

$\angle KMR \cong \angle POR$

Prove: $\angle ROM \cong \angle RMO$

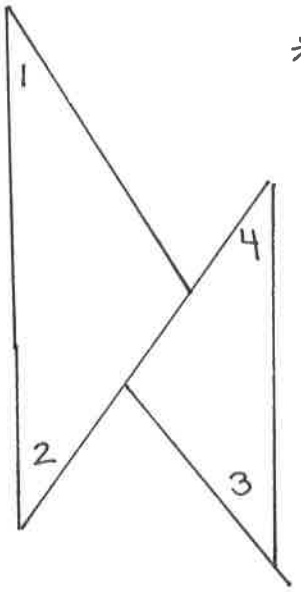


Given: $m\angle 3 = 40°$

$\angle 1 \cong \angle 2$

$\angle 2 \cong \angle 3$

Prove: $m\angle 1 = m\angle 3$



* not drawn to scale *

Given: C is the midpoint of $\overline{BD}$

Prove: $AB + CD = AC$

Given: C is the midpoint of $\overline{BD}$

Prove: $BC = \frac{1}{2}BD$

Given: $\angle T$ and $\angle S$ are complementary.
$\angle U$ and $\angle S$ are complementary.

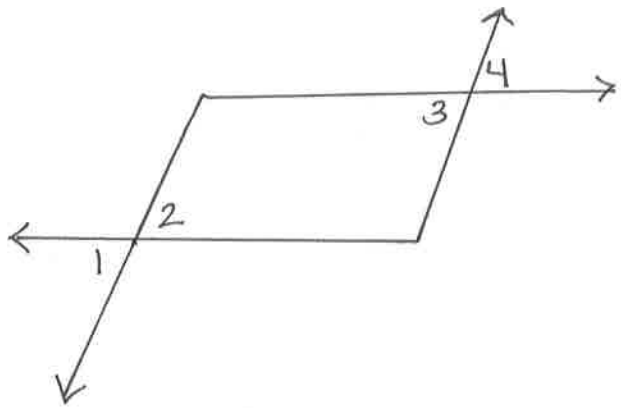
Prove: $\angle U \cong \angle T$

Given: $\angle G$ and $\angle F$ are supplementary.
$\angle F$ and $\angle H$ are supplementary.

Prove: $\angle G \cong \angle H$

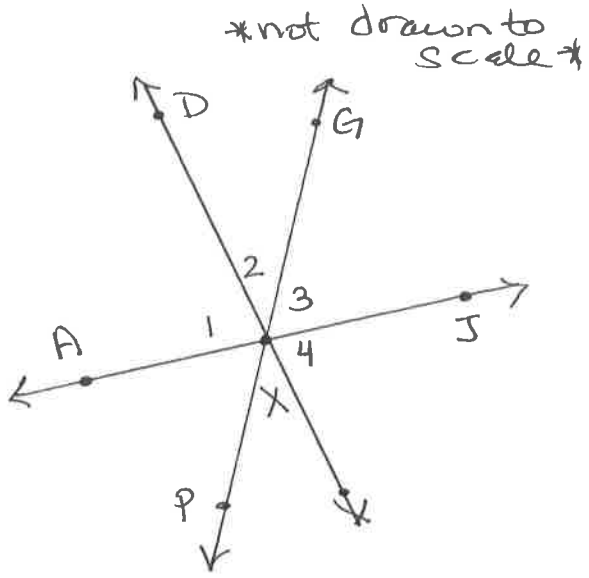
Given: $\angle 1 \cong \angle 4$

Prove: $\angle 2 \cong \angle 3$



Given: $\overrightarrow{XD}$ bisects $\angle AXG$

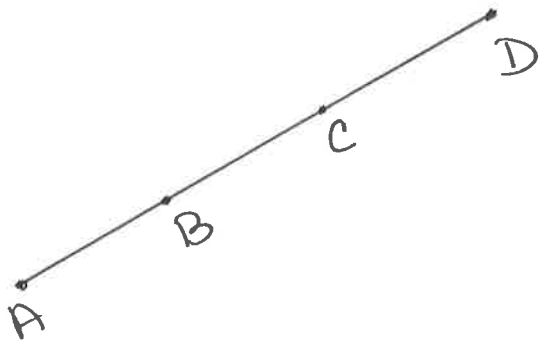
Prove: $\angle 2 \cong \angle 4$



Given: B is the midpoint of $\overline{AC}$.

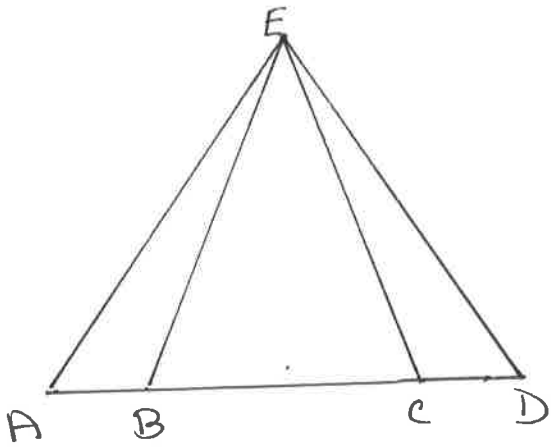
C is the midpoint of $\overline{BD}$.

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



Given: $AB = DC$

Prove: $AC = DB$



Given: X is the midpoint of $\overline{WY}$ and $\overline{VZ}$

Prove: $VW = ZY$

Given: $m\angle 4 + m\angle 5 = 180$

Prove: $m\angle 3 = m\angle 6$