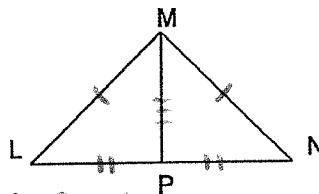


Key

1. Given: $\triangle LMN$ is an isosceles triangle with vertex M.

MP bisects LN.

Prove: $\angle LMP \cong \angle NMP$

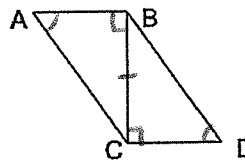


Statements	Reasons
$\triangle LMN$ is isosceles triangle.	Given
\overline{MP} bisects \overline{LN}	Given
$LM \cong MN$	isosceles triangle
$LP \cong NP$	Bisect definition
$MP \cong MP$	Reflexive property
$\triangle LMP \cong \triangle NMP$	SSS
$\angle LMP \cong \angle NMP$	CPCTC

2. Given: $\overline{AB} \perp \overline{BC}$, $\overline{CD} \perp \overline{BC}$

$\angle A \cong \angle D$

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



Statements	Reasons
$\overline{AB} \perp \overline{BC}$, $\overline{CD} \perp \overline{BC}$	Given
$\angle A \cong \angle D$	Given
$\angle B \cong \angle C = 90^\circ$	right angle
$\overline{BC} \cong \overline{BC}$	Reflexive property
$\triangle ABC \cong \triangle DCB$	AAS
$\overline{AC} \cong \overline{DB}$	CPCTC