TH-G Geometry Week 20

SSS / SAS / ASA / AAS

Given: $\overline{QK} \cong \overline{QA}$

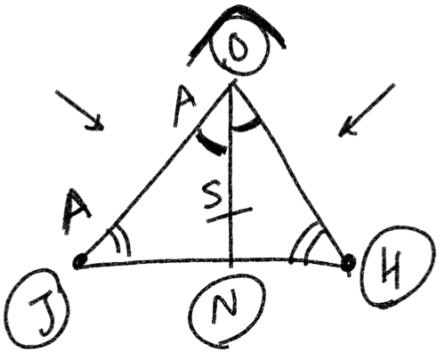
$\overline{QB}$ bisects $\angle KQA$

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

Statement	Reason
$\overline{QK} \cong \overline{QA}$	Given
$\overline{QB}$ bisects $\angle KQA$	Given
$\angle KQB \cong \angle AQB$	Definition of bisector
$\overline{QB} \cong \overline{QB}$	Reflexive Property
$\triangle QKB \cong \triangle QAB$	SAS ←
$\overline{KB} \cong \overline{AB}$	CPCTC ←

CPCTC

Corresponding **P**arts of **C**ongruent **T**riangles are **C**ongruent

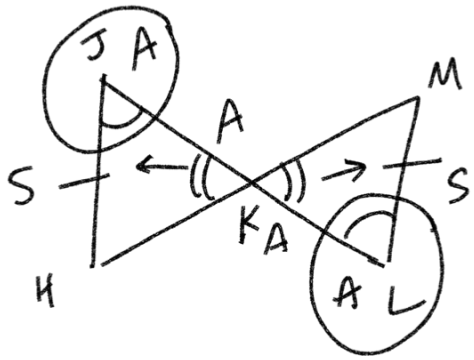


Given: $\overline{ON}$ bisects $\angle JOH$ ✓

$\angle J \cong \angle H$ ✓

Prove: $\overline{JN} \cong \overline{HN}$

Statement	Reason
$\overline{ON}$ bisects $\angle JOH$	Given
$\angle J \cong \angle H$	Given
$\angle JON \cong \angle HON$	Definition of bisector
$\overline{ON} \cong \overline{ON}$	Reflexive Property
$\triangle JON \cong \triangle HON$	AAS
$\overline{JN} \cong \overline{HN}$	CPCTC

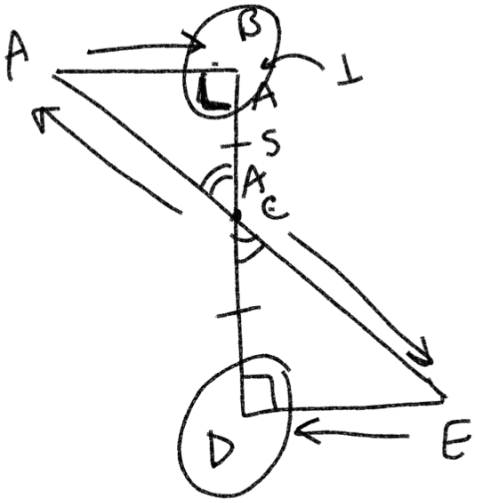


Given: $\angle J \cong \angle L$

$\overline{ML} \cong \overline{HJ}$

Prove: $\overline{KM} \cong \overline{KH}$

Statement	Reason
$\angle J \cong \angle L$	Given
$\overline{ML} \cong \overline{HJ}$	Given
$\angle JKH \cong \angle LKM$	vertical angles
$\triangle JKM \cong \triangle LKM$	AAS
$\overline{KM} \cong \overline{KH}$	CPCTC



Given: $\overline{BD} \perp \overline{AB}$ (perpendicular) 90° angle

$\overline{BD} \perp \overline{DE}$

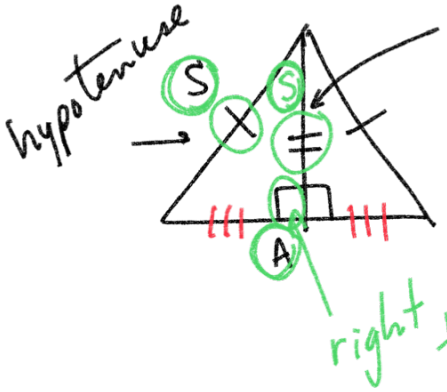
$\overline{BC} \cong \overline{CD}$

Prove: $\angle A \cong \angle E$

Statement	Reason
$\overline{BD} \perp \overline{AB}$	Given
$\overline{BD} \perp \overline{DE}$	Given
$\overline{BC} \cong \overline{CD}$	Given
$\angle BCA \cong \angle DCE$	vertical angles
$\triangle CAB \cong \triangle CED$	ASA
$\angle A \cong \angle E$	CPCTC

Cajun Pandas Can Totally Cook

HL Hypotenuse - Leg (Right Triangles)



Kevin Hart

Reflexive Property

Pythagorean Theorem

$a^2 + b^2 = c^2$

HW

Ch 4-4 even

Online HW 20 } Feb 25th

Quiz 20

HW/Quiz 18 due Feb 12th

HW/Quiz 19 due Feb 20th