

Lesson Guide

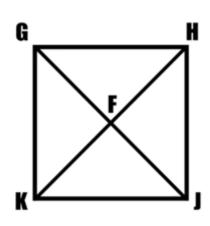
This lesson guide accompanies the following video lesson:

Practice with Geometry Proofs

Side-Side-Side
SSS
Angle-Side-Angle
ASA
Hypotenuse-Leg



Practice Proof #1



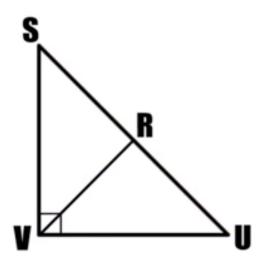
Pro Tip: Used colored pens/pencils and highlighters to help you label the diagrams!

Given: \overline{GJ} and \overline{HK} bisect each other at F.

Prove: $\Delta GFK \cong \Delta HFJ$

STATEMENTS	REASONS

Practice Proof #2



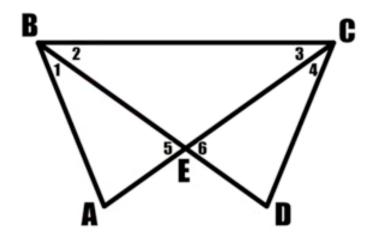
Given: R is the midpoint of \overline{SU}

 $\overline{SV} \cong \overline{UV}$

Prove: $\Delta RSV \cong \Delta RUV$

STATEMENTS	REASONS

Practice Proof #3



Given: $\angle A \cong \angle D$

 $\angle 2 \cong \angle 3$

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

STATEMENTS	REASONS

Answer Key

#1

STATEMENTS	REASONS
\overline{GJ} and \overline{HK} bisect each other at F.	Given
$\overline{GF} \cong \overline{JF} \ \& \ \overline{KF} \cong \overline{HF}$	Def. of Bisect
$\angle GFK \cong \angle HFJ$	Vertical Angles
$\Delta GFK \cong \Delta HFJ$	SAS

#2

REASONS	STATEMENTS
Given	R is the midpoint of \overline{SU}
Def. of Midpoi	$\overline{SR} \cong \overline{UR}$
Given	$\overline{SV} \cong \overline{UV}$
Reflexive Prope	$\overline{VR} \cong \overline{VR}$
SSS	$\Delta RSV \cong \Delta RUV$

STATEMENTS	REASONS
$\angle A \cong \angle D$	Given
∠2 ≅ ∠3	Given
ΔBCE is isoscles	Base Angle Theorem
$\overline{BE} \cong \overline{CE}$	Def. of Isosceles Triangle
∠5 ≅ ∠6	Vertical Angles
$\Delta BAE \cong \Delta CDE$	AAS
$\overline{AE} \cong \overline{DE}$	CPCTC