

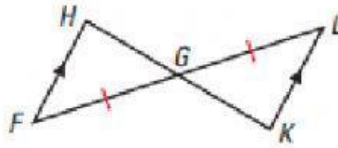
Triangle Congruence Proofs (ASA and AAS)

Drag and drop to fill in the blanks.

Given ▶ $\overline{GF} \cong \overline{GL}$

$\overline{FH} \parallel \overline{LK}$

Prove ▶ $\triangle FGH \cong \triangle LGK$



Statements

1. $\overline{GF} \cong \overline{GL}$

2. $\overline{FH} \parallel \overline{LK}$

3. $\angle F \cong \angle L$

4. _____ ?

5. $\triangle FGH \cong \triangle LGK$

Reasons

1. Given

2. _____ ?

3. _____ ?

4. Vertical Angles Theorem

5. _____ ?

AAS

Alt int angles

Given

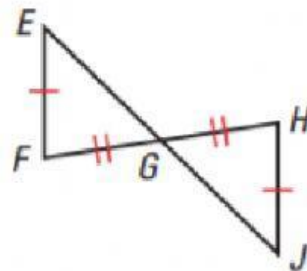
Given

$\angle FGH \cong \angle LGK$

Given: $\overline{EF} \cong \overline{JH}$

$\overline{FG} \cong \overline{HG}$

Prove: $\triangle EFG \cong \triangle JHG$



Statements	Reasons

SSA

Given

Vertical Angles Theorem

$\triangle EFG \cong \triangle JHG$

$\overline{FG} \cong \overline{HG}$

Given

$\overline{EF} \cong \overline{JH}$

$\angle FGE \cong \angle HGJ$