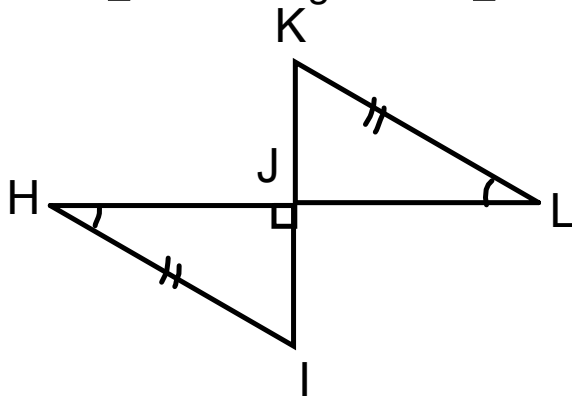


Warm Up

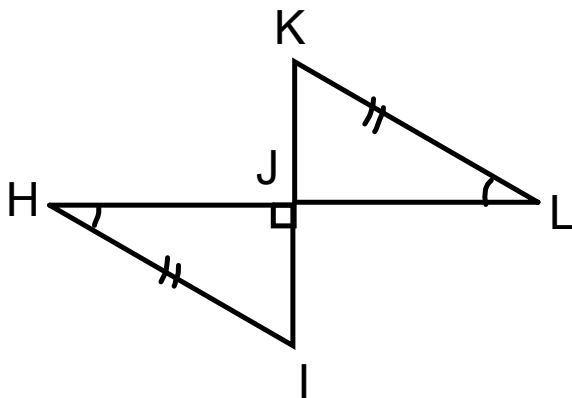
Prove the following triangles are congruent

Prove $\triangle HIJ$ is congruent to $\triangle LKJ$.



Today's Goals

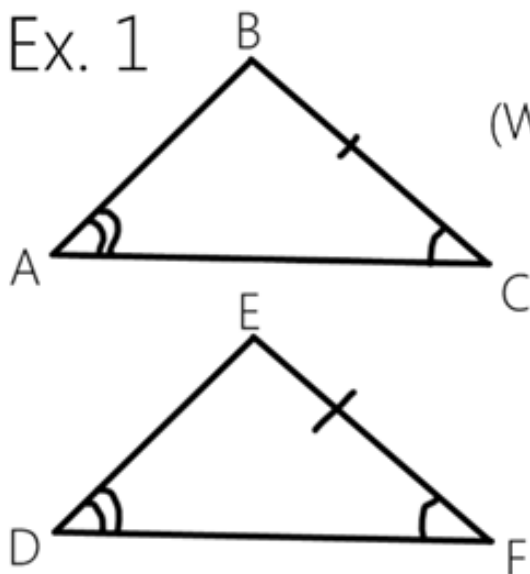
- Talk About Triangle Congruence Test
- Understand what CPCTC is.
- Review for Test



Now that we know the triangles are congruent, what else can we determine about the unknown sides and angles?

Let's apply this

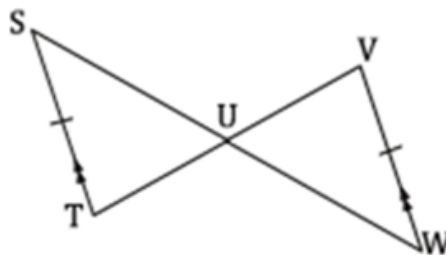
Ex. 1



Prove that $\overline{AB} \cong \overline{DE}$

| (What we know) Statement | (How we know) Reason |
|-------------------------------------|-------------------------|
| $\angle A \cong \angle D$ | Given |
| $\angle C \cong \angle F$ | Given |
| $\overline{BC} \cong \overline{EF}$ | Given |
| $\triangle ABC \cong \triangle DEF$ | AAS |
| $\overline{AB} \cong \overline{DE}$ | CPCTC |

Ex. 2 .Given: $\overline{ST} \parallel \overline{WV}$, and $\overline{ST} \cong \overline{VW}$

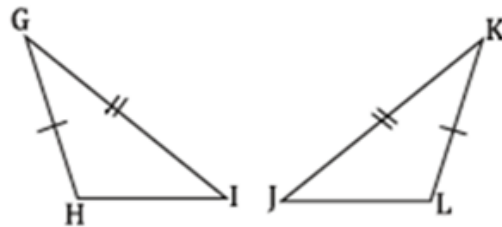


Prove: $\angle SUT \cong \angle WUV$

| Statements | Reasons |
|----------------------------------|-----------------------|
| 1. | 1. Given |
| 2. | 2. Given |
| 3. | 3. Alternate Interior |
| 4. $\angle SUT \cong \angle WUV$ | 4. |
| 5. | 5. AAS |
| 6. | 6. |

Try # 1 on the practice sheet

Given: $\overline{GH} \cong \overline{KL}$, $\angle G \cong \angle K$, and $\overline{GI} \cong \overline{KJ}$

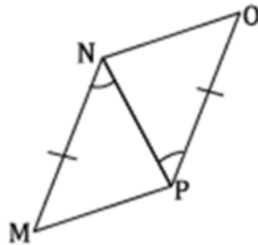


Prove: $\overline{HI} \cong \overline{LJ}$

| Statements | Reasons |
|--|----------|
| 1. $\overline{GH} \cong \overline{KL}$ | 1. Given |
| 2. | 2. Given |
| 3. $\overline{GI} \cong \overline{KJ}$ | 3. |
| 4. | 4. SAS |
| 5. $\overline{HI} \cong \overline{LJ}$ | 5. |

Try #2 on the practice sheet

Given: $\angle MNP \cong \angle OPN$, and $\overline{MN} \cong \overline{OP}$



Prove: $\overline{MP} \cong \overline{NO}$

| Statements | Reasons |
|--|----------|
| 1. _____ | 1. Given |
| 2. $\overline{MN} \cong \overline{OP}$ | 2. |
| 3. $\overline{NP} \cong \overline{NP}$ | 3. |
| 4. $\triangle MNP \cong \triangle OPN$ | 4. |
| 5. | 5. CPCTC |

Independent Practice

3-6

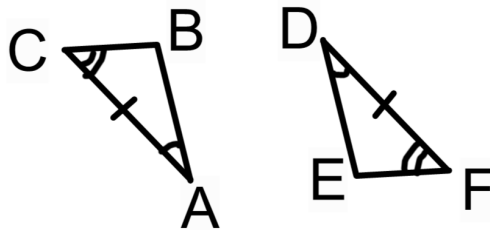
Review Answers

Corresponding parts of Congruent Triangles

Gallery Walk

Sticky Note Check

Prove that $\overline{AB} \cong \overline{DE}$

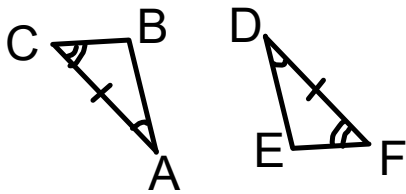


Review

What does CPCTC stand for?

What needs to be proven before CPCTC can be used?

Prove that $\overline{AB} \cong \overline{DE}$



February 27, 2017