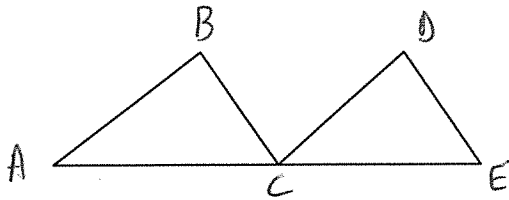


**Proving Triangle Congruence by ASA & AAS – Day 3**  
Unit 4: Similarities

Prove each of the following using an emphasis on Angle-Side-Angle and Angle-Angle-Side:

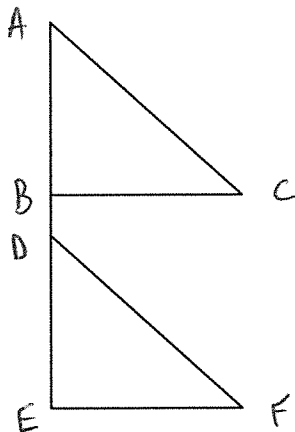
1. **Given:**  $\overline{CD}$  bisects  $\overline{AE}$   
 $\overline{AB} \parallel \overline{CD}$   
 $\angle E \cong \angle BCA$

**Prove:**  $\triangle ABC \cong \triangle CDE$



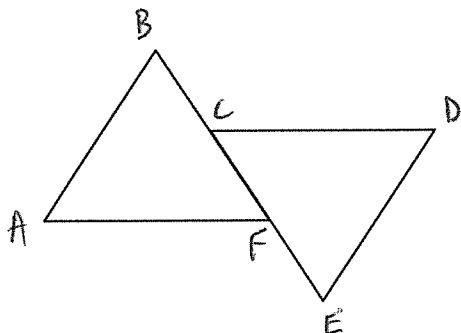
2. **Given:**  $\overline{AB} \cong \overline{ED}$   
 $\angle C \cong \angle F$   
 $\overline{BC} \parallel \overline{EF}$

**Prove:**  $\triangle ABC \cong \triangle DEF$



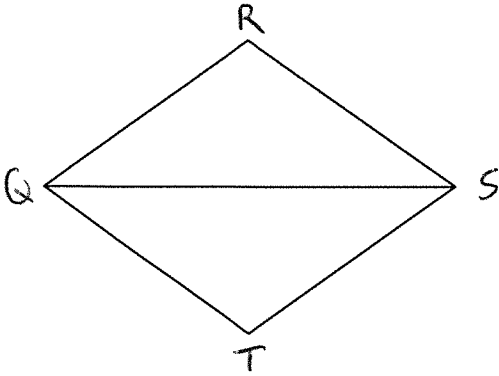
3. **Given:**  $\overline{AF} \parallel \overline{CD}$   
 $\overline{AB} \parallel \overline{DE}$   
 $\overline{AB} \cong \overline{DE}$

**Prove:**  $\triangle ABF \cong \triangle DEC$



4. **Given:**  $\overline{QS}$  bisects  $\angle RST$   
 $\overline{QS}$  bisects  $\angle RQT$

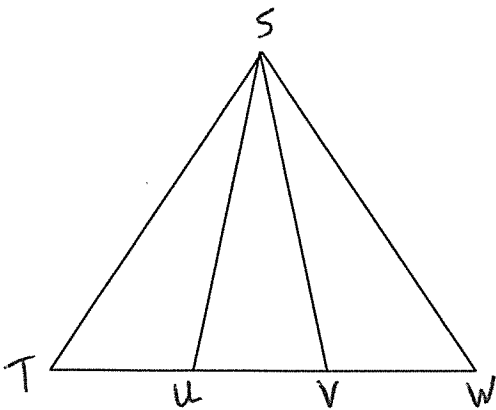
**Prove:**  $\triangle RQS \cong \triangle TSQ$



**Prove each of the following:**

5. **Given:** U and V trisect  $\overline{TW}$   
 $\triangle STW$  is an isosceles  $\triangle$

**Prove:**  $\triangle STU \cong \triangle SWV$



6. **Given:** C is the midpoint of  $\overline{AE}$   
C is the midpoint of  $\overline{BD}$

**Prove:**  $\triangle CAB \cong \triangle CDE$

