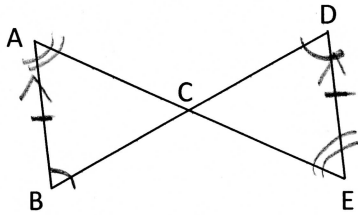


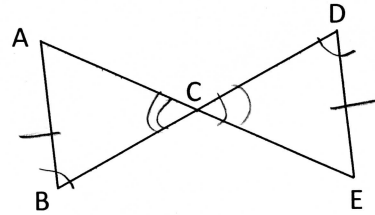
Topic 13
Triangle Congruency Proofs
Practice Quiz 2

1) Given: $\overline{AB} \cong \overline{ED}$
 $\overline{AB} \parallel \overline{ED}$
Prove: $\triangle ACB \cong \triangle ECD$



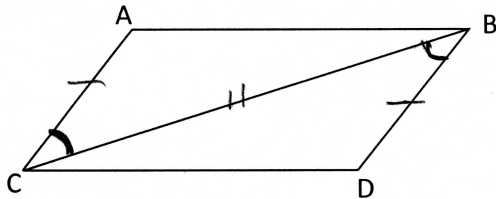
Statements	Reasons
$\overline{AB} \cong \overline{ED}$	Given
$\overline{AB} \parallel \overline{ED}$	Given
$\angle B \cong \angle D$	alt. int. \angle 's \cong
$\angle A \cong \angle E$	alt. int. \angle 's \cong
$\triangle ACB \cong \triangle ECD$	ASA

2) Given: $\overline{AB} \cong \overline{ED}$
 $\angle B \cong \angle D$
Prove: $\triangle ABC \cong \triangle EDC$



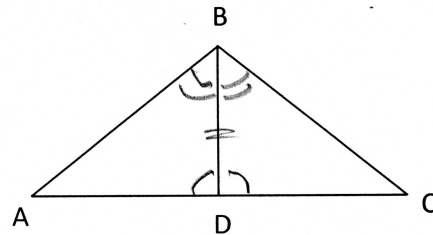
Statements	Reasons
$\overline{AB} \cong \overline{ED}$	Given
$\angle B \cong \angle D$	Given
$\angle ACB \cong \angle ECD$	Vertical \angle 's \cong
$\triangle ABC \cong \triangle EDC$	AAS

3) Given: $\overline{BD} \cong \overline{AC}$
 $\angle CBD \cong \angle ACB$
Prove: $\triangle ABC \cong \triangle DCB$



Statements	Reasons
$\overline{BD} \cong \overline{AC}$	Given
$\angle CBD \cong \angle ACB$	Given
$\overline{CB} \cong \overline{CB}$	Reflexive Prop.
$\triangle ABC \cong \triangle DCB$	SAS

4) Given: \overline{BD} bisects $\angle ABC$
 $\angle ADB \cong \angle CDB$
Prove: $\triangle ADB \cong \triangle CDB$



Statements	Reasons
\overline{BD} bisects $\angle ABC$	Given
$\angle ADB \cong \angle CDB$	Given
$\angle ABD \cong \angle CBD$	def. of \angle Bisector
$\overline{BD} \cong \overline{BD}$	Reflexive Prop.
$\triangle ABD \cong \triangle CBD$	ASA