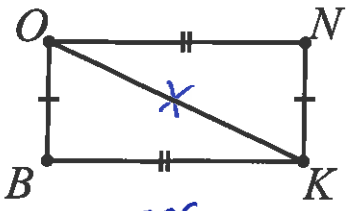
Geometry – Mr. Bo
Unit 4 - Day 4 Notes

Name:_____
Date:_____

Postulate: Corresponding Parts of congruent triangles are Congruent (CPCTC)

Examples:

1. Given: $\overline{BO} \cong \overline{NK}$
$\overline{BK} \cong \overline{NO}$
Prove: $\angle B \cong \angle N$

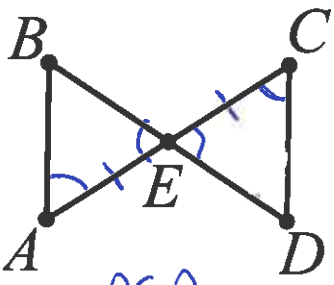


SSS

*must prove 2 △'s ≅ first.

S	R
① $\overline{BO} \cong \overline{NK}$ (side)	① Given
$\overline{BK} \cong \overline{NO}$ (side)	
② $\overline{OK} \cong \overline{OK}$ (side)	② Reflexive
③ $\triangle BOK \cong \triangle NKO$	③ SSS
④ $\angle B \cong \angle N$	④ Corr. parts ≅ △'s ≅ (CPCTC)

2. Given: $\overline{AB} \parallel \overline{CD}$
E midpoint of $\overline{AC}$
Prove: $\overline{BA} \cong \overline{DC}$



ASA

prove △'s ≅ first.

S	R
① $\overline{AB} \parallel \overline{CD}$, E midpt. of $\overline{AC}$	① Given
② $\angle A \cong \angle C$	② 2 ∥ lines cut by trans. make alt. int. ∠'s ≅.
③ $\overline{AE} \cong \overline{CE}$	③ midpt make 2 ≅ segs.
④ $\angle BEA \cong \angle DEC$	④ Vert. ∠'s ≅
⑤ $\triangle BEA \cong \triangle DEC$	⑤ ASA
⑥ $\overline{BA} \cong \overline{DC}$	⑥ Corr. parts ≅ △'s ≅ (cpctc)