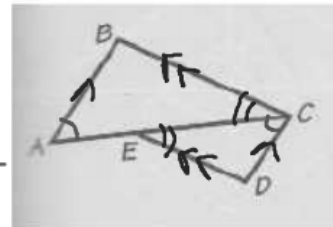


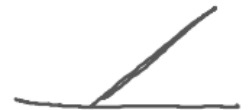
Math 3  
Proving Triangles Similar

Name \_\_\_\_\_

1. Given:  $\overline{BC} \parallel \overline{ED}, \overline{AB} \parallel \overline{DC}$   
Prove:  $\triangle ABC \sim \triangle CDE$

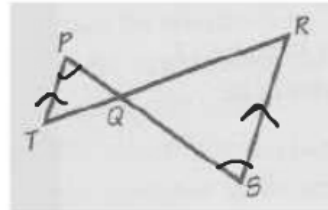


AA  
SSS  
SAS



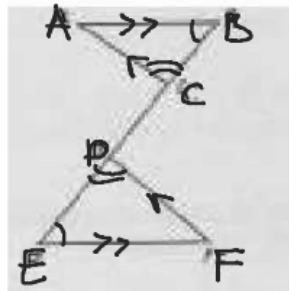
Statement	Reason
1) $\overline{BC} \parallel \overline{ED}, \overline{AB} \parallel \overline{DC}$	1) Given
2) $\angle BAC \cong \angle ECD$	2) Alternate Interior $\angle$ 's $\cong$
3) $\angle DEC \cong \angle BCA$	3) Alternate Interior $\angle$ 's
4) $\triangle ABC \sim \triangle CDE$	4) AA

2. Given:  $\triangle QTP \sim \triangle QRS$   
Prove:  $\overline{PT} \parallel \overline{SR}$



Statement	Reason
1) $\triangle QTP \sim \triangle QRS$	1) Given
2) $\angle P \cong \angle S$	2) Def of Similar $\Delta$ 's
3) $\overline{PT} \parallel \overline{SR}$	3) $\nabla$ If Alternate Int $\angle$ 's $\cong$ then lines are ll.

3. Given:  $\overline{AB} \parallel \overline{EF}, \overline{AC} \parallel \overline{DF}$   
Prove:  $\triangle ABC \sim \triangle FED$



4. Given:  $\overline{AB} \perp \overline{BD}, \overline{EC} \perp \overline{BD}$   
Prove:  $\triangle BDA \sim \triangle CDE$

