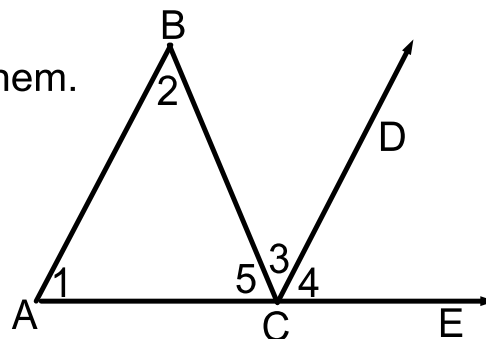


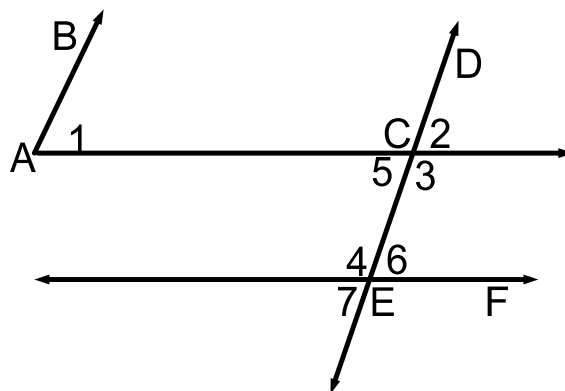
Find the errors in each proof and correct them.

1. Given: $\overline{AB} \parallel \overline{CD}$; $m\angle 1 = m\angle 2$
 Prove: $m\angle 3 = m\angle 4$



Statements	Reasons
1. $\overline{AB} \parallel \overline{CD}$; $m\angle 1 = m\angle 2$	1. Given
2. $m\angle 2 = m\angle 3$	2. If lines parallel, then alt. ext. angles = (alt. ext. angles thm.)
3. $m\angle 1 = m\angle 3$	3. Linear Pair Postulate
4. $m\angle 1 = m\angle 4$	4. If lines parallel, then corr. angles = (corr angles post)
5. $m\angle 1 = m\angle 5$	5. Substitution Property

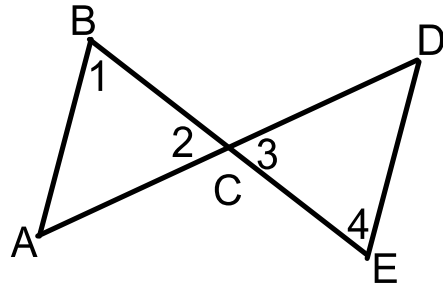
2. Given: $\overline{AB} \parallel \overline{CD}$; $m\angle 1 = m\angle 6$
 Prove: $\overline{AC} \parallel \overline{EF}$



Statements	Reasons
1. $\overline{AB} \parallel \overline{CD}$; $m\angle 1 = m\angle 6$	1. Given
2. $m\angle 1 = m\angle 2$	2. Substitution Property
3. $m\angle 2 = m\angle 6$	3. If lines parallel, then corr. angles = (corr angles post)
4. $\overline{AC} \parallel \overline{EF}$	4. If lines //, then s.s. int. angles supp. (ss. int. angles thm.)

3. Given: $\overline{AB} \parallel \overline{DE}$; $m\angle 1 = m\angle 2$

Prove: $m\angle 3 = m\angle 4$



Statements	Reasons
1. $\overline{AB} \parallel \overline{DE}$; $m\angle 1 = m\angle 2$	1. Given
2. $m\angle 2 = m\angle 3$	2. Linear Pair Postulate
3. $m\angle 1 = m\angle 3$	3. If lines parallel, then alt. int. angles = (alt int angles thm.)
4. $m\angle 1 = m\angle 2$	4. Substitution Property
5. $m\angle 3 = m\angle 4$	5. Substitution Property