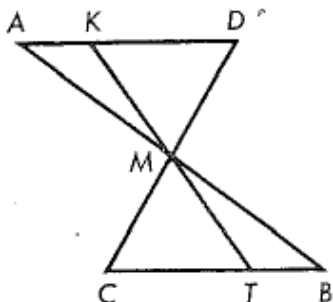


### 5-10.2 Two Doubles and One Interesting Proof.

Problem A (a double proof)

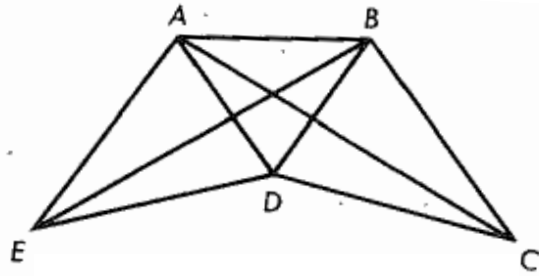
Prove that if  $\angle D \cong \angle DKM$  and  $KM = CM$ ,  $TM$ , then  $AD = BC$ .



1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.
13.	13.
14.	14.
15.	15.
16.	16.
17.	17.

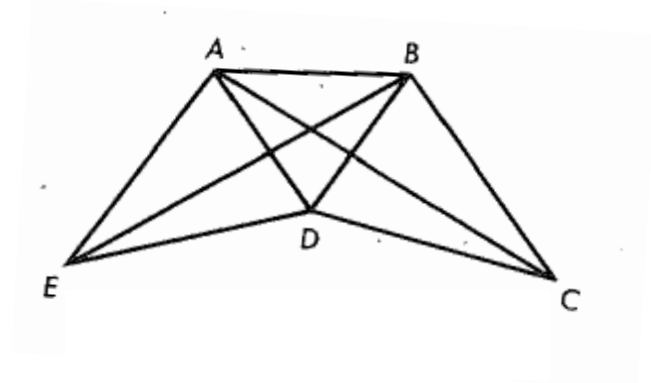
Problem B (done with a double)

Given the figure with  $\angle BAE \cong \angle ABC$ ,  $AE = BC$ ,  $DE = DC$ , and  $BD = AD$ . Prove that  $\triangle ADC \cong \triangle BDE$ .



1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.
13.	13.
14.	14.
15.	15.
16.	16.
17.	17.

Problem C (can be done without a double)



In the figure above let  $\overline{AD} \cap \overline{BE} = \{P\}$  and let  $\overline{BD} \cap \overline{AC} = \{Q\}$ . Show that if  $\triangle APB \cong \triangle BQA$  and  $AC = BE$ , then  $AE = BC$ .

1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.
13.	13.
14.	14.
15.	15.
16.	16.
17.	17.