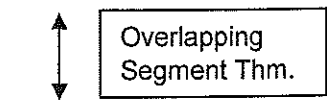


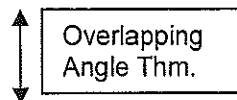
Using Theorems

$$\overline{AB} \cong \overline{CD}$$



$$\overline{AC} \cong \overline{BD}$$

$$\angle AOC \cong \angle BOD$$



$$\angle AOB \cong \angle COD$$

Draw a conclusion by applying either the overlapping segment theorem or the overlapping angle theorem.

Given:

Conclude:

1. $\angle AOC \cong \angle BOD$

2. $\angle AOE \cong \angle BOF$

3. $\angle BOE \cong \angle COF$

4. $\angle AOD \cong \angle BOE$

5. $\angle BOC \cong \angle DOE$

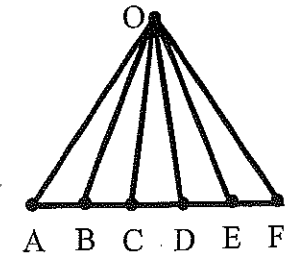
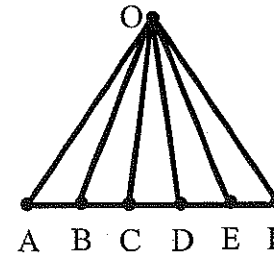
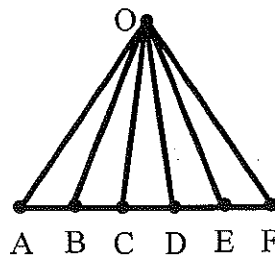
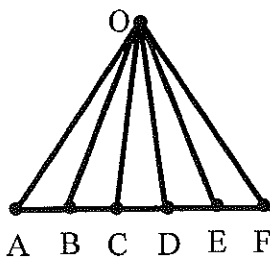
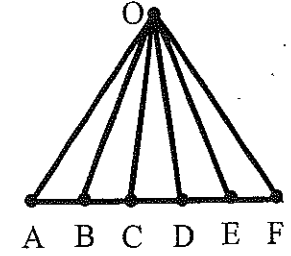
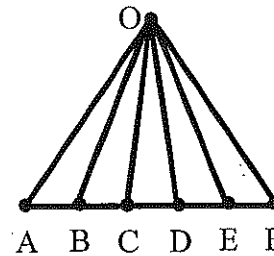
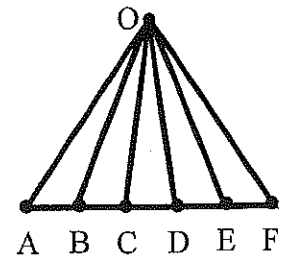
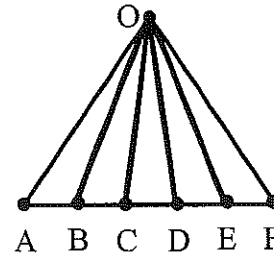
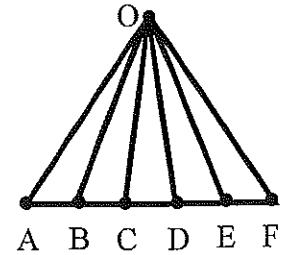
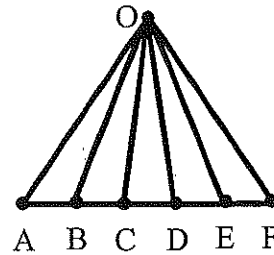
6. $\overline{AC} \cong \overline{BD}$

7. $\overline{AE} \cong \overline{BF}$

8. $\overline{BC} \cong \overline{DE}$

9. $\overline{AC} \cong \overline{DF}$

10. $\overline{BE} \cong \overline{CF}$



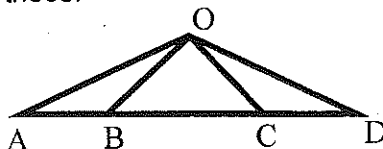
Write flow proofs for each of these:

11. Given: $\overline{AC} \cong \overline{BD}$

$$\overline{AO} \cong \overline{DO}$$

$$\angle OAB \cong \angle ODC$$

Prove: $\triangle AOB \cong \triangle DOC$



12. Given: $\angle AOB \cong \angle COD$

$$\overline{AO} \cong \overline{DO}$$

$$\angle OAB \cong \angle ODC$$

Prove: $\triangle AOC \cong \triangle DOB$

