Solve each of the following question using appropriate Euclid's axiom :

1. Two salesmen make equal sales during the month of August. In September, each salesman doubles his sale of the month of August. Compare their sales in September.

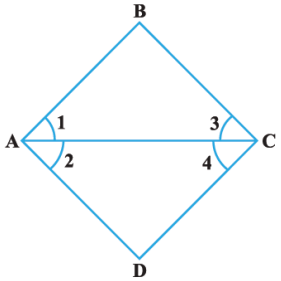
2. It is known that $x + y = 10$ and that $x = z$. Show that $z + y = 10$?

3. Look at the Fig. 5.3. Show that length AH > sum of lengths of AB + BC + CD

4. In a triangle ABC , x and y are point on AB and BC such that AB = BC, BX = BY. Show that AX = CY.

5. In a triangle ABC we have X and Y are the mid-points of AC and BC and AX = CY. Show that AB = BC

6. **4.** In a triangle ABC , x and y are point on AB and AC such that BX = 1/2AB and BY =1/2 BC and AB = BC. Show that BX = BY

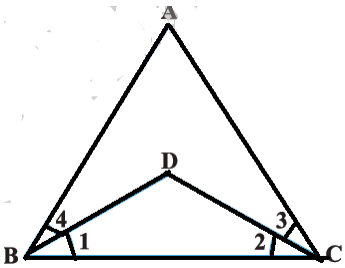


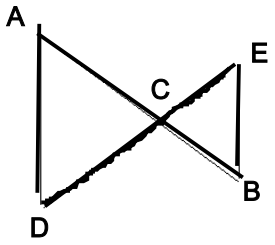
7. In the Fig. we have <1 = <2, <2 = <3. Show that <1 = <3.

8. In the Fig. we have

<1 = <3 and <2 = <4. Show that <A = <C.

9. In the Fig. we have ,<ABC = <ACB, <3 = <4. Show that <1 = <2.





10. In the given fig. 5.10, we have AC = DC, CB = CE. Show that AB = DE.