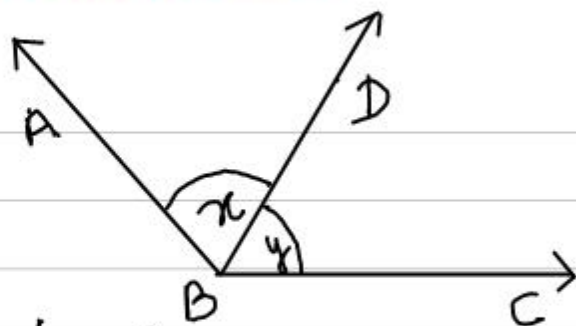


NCERT Exemplar Solutions by Dev Anoop (Bathinda)

- ① ABC will be a line for  
 $x + y = 180^\circ$   
 (linear pair axiom)



- ② No.  
 Sum of 3 angles  $< 180^\circ$   
 but Sum of 3 angles of  $\Delta = 180^\circ$

- ③ No.  
 $\therefore$  Sum of two obtuse angles  $> 180$   
 but Sum of 3 angles of  $\Delta = 180^\circ$

- ④  $45 + 64 + 72$   
 $= 181^\circ$   
 $\therefore$  No  $\Delta$  can be drawn  
 [Sum of 3 angles of  $\Delta = 180^\circ$ ]

- ⑤  $53 + 64 + 63$   
 $= 180^\circ$   
 Infinitely many  $\Delta$ s with different lengths of sides

- ⑥ For  $l$  and  $m$  to be parallel  
 $x + 44 = 180$   
 $\Rightarrow x = 180 - 44$   
 $= 136^\circ$

