

- Q7. c)  $60^\circ$   
Q8. b)  $40^\circ$

Exercise - 6.2

1. Straight line measures  $= 180^\circ$

$x + y = 180^\circ$

2. No, because they wouldn't sum to  $180^\circ$ . Hence, it won't form a  $\Delta$ .

3. No, because if the  $\Delta$  have two obtuse angles i.e., more than  $90^\circ$  angle then the sum of all 3 angles of a  $\Delta$  will not be equal to  $180^\circ$

4. None  $\Delta$ s can be drawn using the given angles

5. Infinitely many  $\Delta$ s can be drawn ( $53^\circ + 64^\circ + 63^\circ = 180^\circ$ )

6. ~~Given~~ Given,  $l \parallel m$  &  $n$  is transversal,

~~so~~ so,  $a 44^\circ \neq x = 180^\circ$  (co-interior  $\angle$ s)

$$\Rightarrow x = 136^\circ$$

7. No, because each of these will be right angle only when they form a linear pair.

8. As  $l \perp m$  & <sup>one</sup> angle is  $90^\circ$ , so rest would also be  $90^\circ$

9. i)  $l \parallel m$  because,  $132^\circ + 48^\circ = 180^\circ$  (Co-int. angles)

ii)  ~~$p \parallel q$~~ , because,  $p \nparallel q$ , because  $73^\circ + 106^\circ \neq 180^\circ$   
 ~~$73^\circ + 106^\circ$~~

10. No, since, ~~two~~ ~~lines~~ &  $m \perp n$

$$\angle 1 = \angle 2 = 90^\circ (\because l \perp m \text{ \& } n)$$

It implies that these are corresponding angles hence,  $l \parallel m$