

Find the points on the  $x$ -axis which are at a distance of 5 units from  $(3, 4)$

Ans:-

Let points be  $(a, 0)$

$$\sqrt{(a-3)^2 + (4-0)^2} = 5$$

$$(a-3)^2 = 25 - 16$$

$$= 9$$

$$a-3 = 3$$

$$a = 3+3$$

$$= 6$$

$$a = 0$$

$$a = 6$$

points on  $x$ -axis =  $6, 0$ .