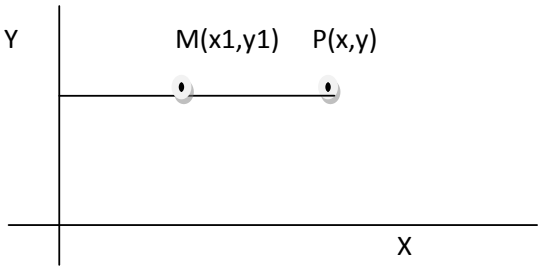
Find the locus of a point equidistance from a point(2,4) and the y axis.

Answer:



The point situated equidistance from a point P(x,y) and the y axis located in the line connected a point P and y axis by the right angel (the nearest distance), according this line is parallel to x-axis and all points of it have equal coordinate **Y**. A distance from M to P equal to distance from M and y axis according this the **X** coordinate of **M** is as ½ **X** of coordinate **P**

The point situated equidistance from a point P have coordinates:

$M(x_1, y_1)$

$y_1 = y$

$x_1 = \frac{1}{2}x;$

Answer: point- (1, 4)