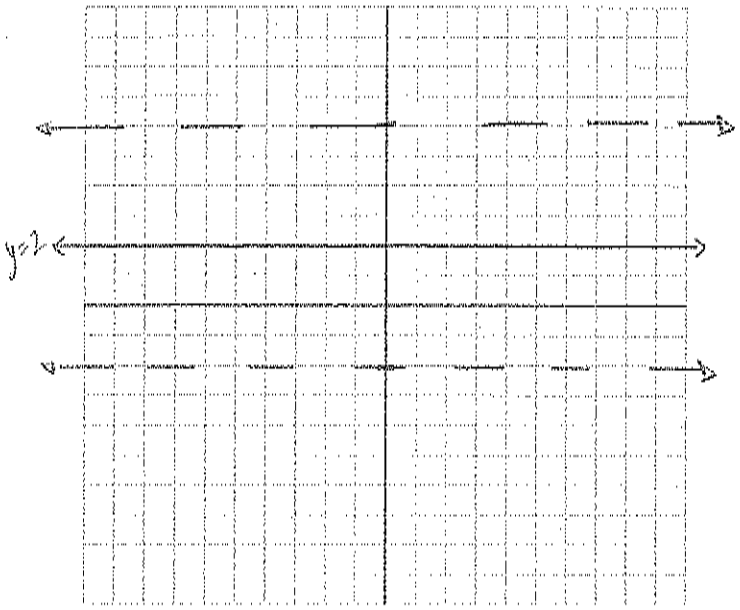
Locus in the Coordinate Plane

Example:

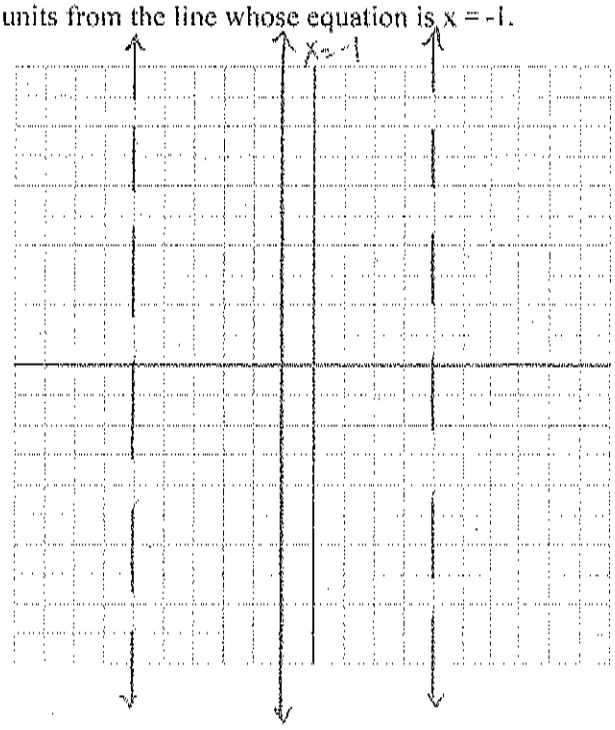
Draw and write the equation of the locus of points 4 units from the line whose equation is $y = 2$.



$y = 6$ & $y = -2$

Try:

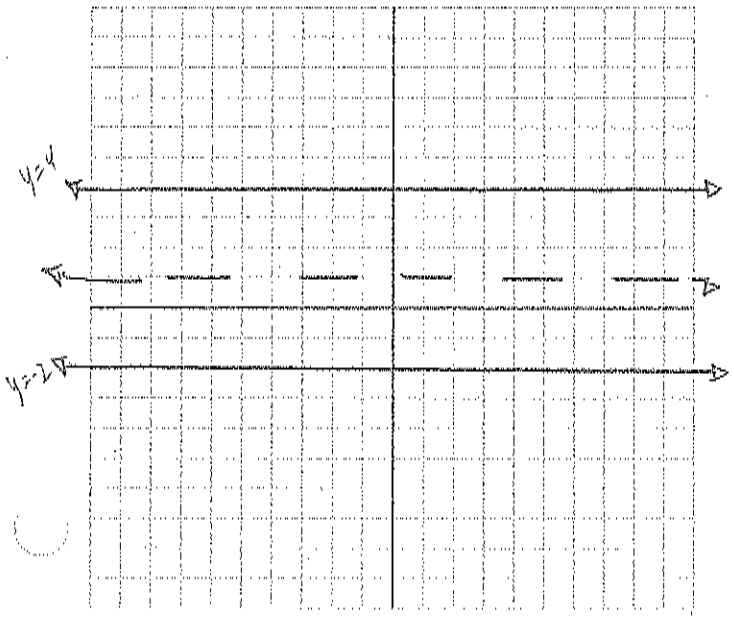
Draw and write the equation of the locus of points 5 units from the line whose equation is $x = -1$.



$x = -6$ & $x = 4$

Example:

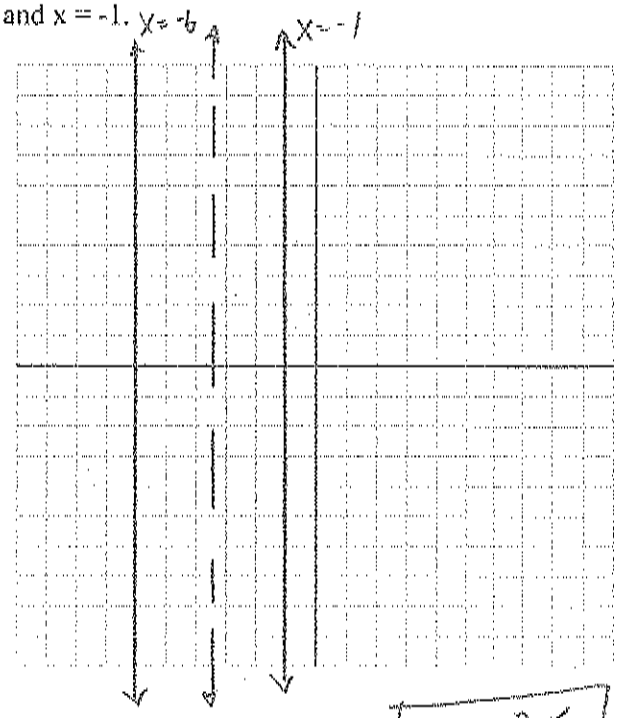
Draw and write the equation of the locus of points equidistant from the lines whose equations are $y = 4$ and $y = -2$.



$y = 1$

Try:

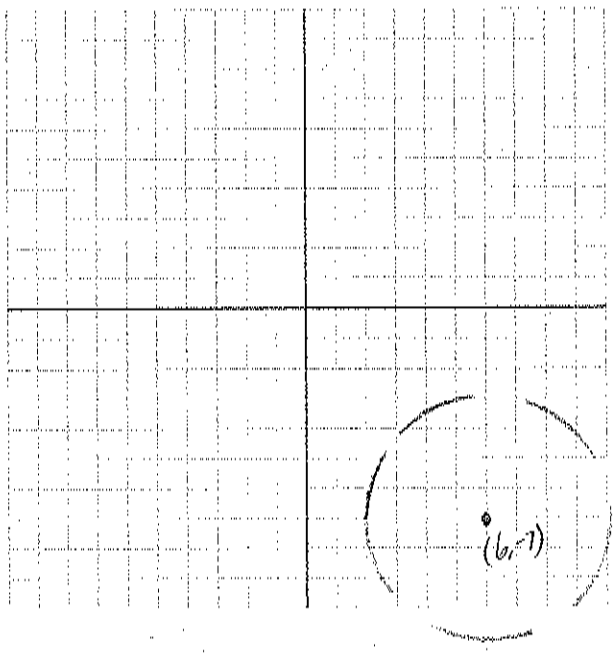
Draw and write the equation of the locus of points equidistant from the lines whose equations are $x = -6$ and $x = -1$.



$x = -3.5$

Example:

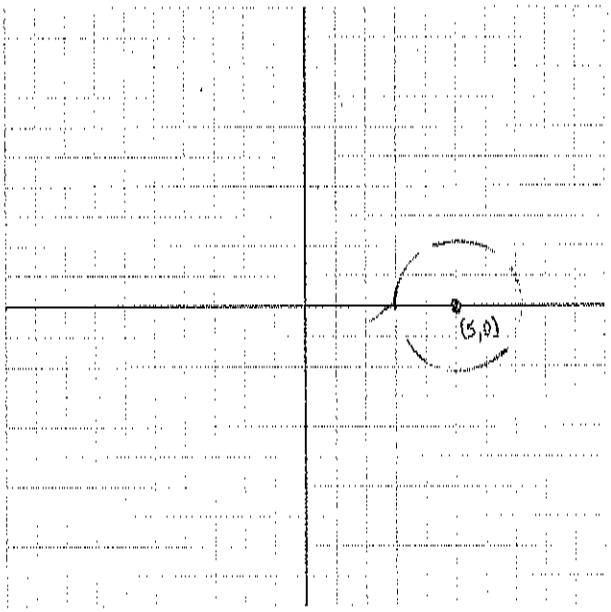
Draw and write the equation of the locus of points 4 units from the point (6, -7).



$(x-6)^2 + (y+7)^2 = 16$

Try:

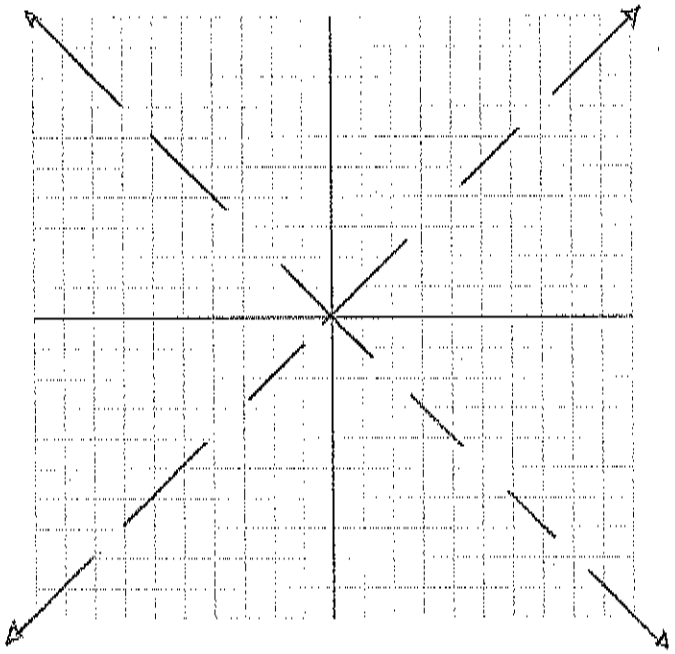
Draw and write the equation of the locus of points 2 units from the point (5, 0)



$(x-5)^2 + y^2 = 4$

Example:

Draw and write the equation of the locus of points equidistant from the x-axis and y-axis.



$y = x$ & $y = -x$