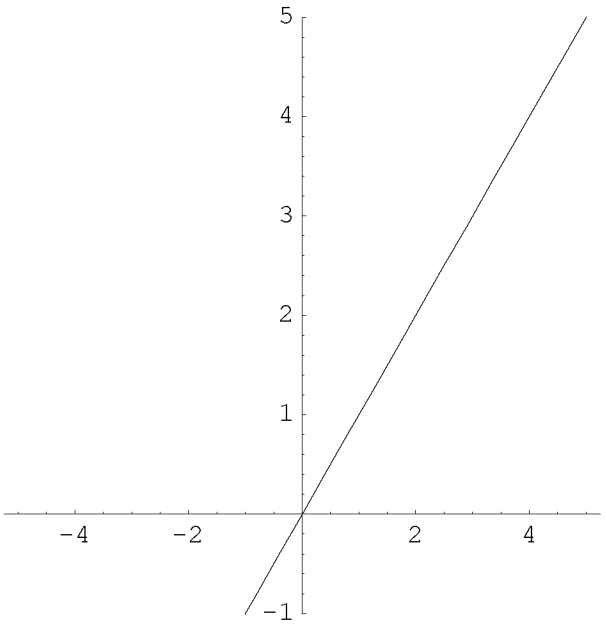
■ A. Give the points which are symmetric to the following points

(a) with respect to the y-axis,
(b) with respect to the origin,
(c) with respect to the x-axis, and
(d) with respect to the line $y = x$.

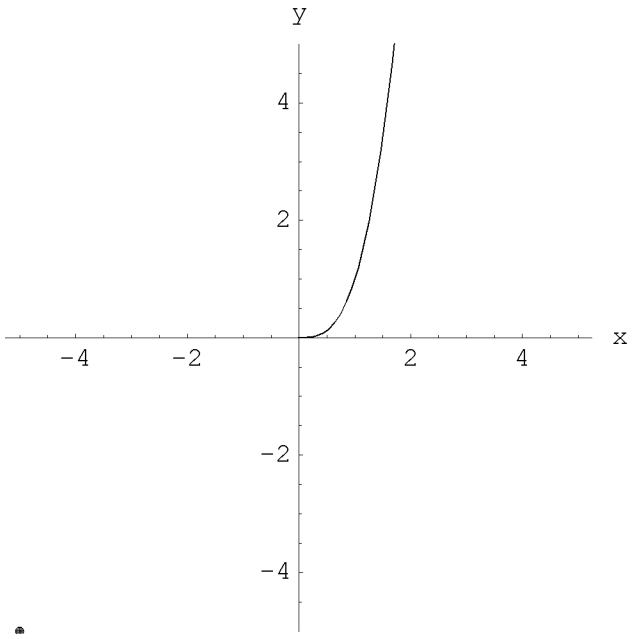
	y - axis	origin	x - axis	y = x
(-5, 17)				
(14, 123)				
(-9, -8)				
$(\pi, \sqrt{5})$				

■ B. Sketch the line or curve.

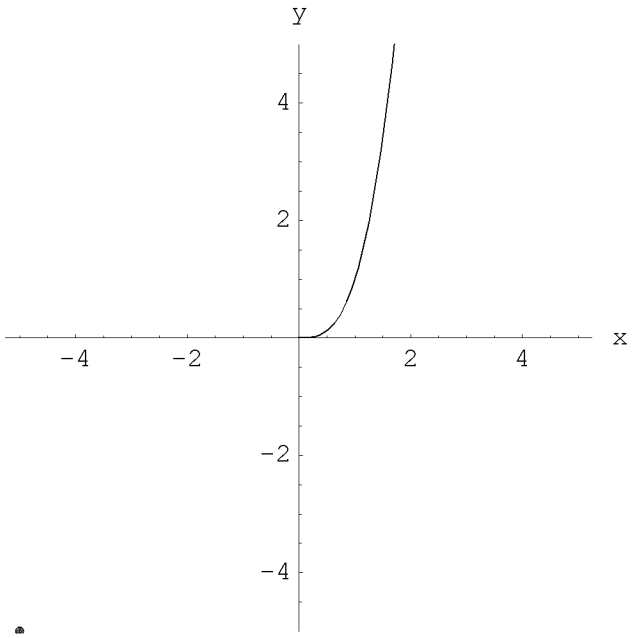
[1] Sketch the line symmetric to the given line with respect to the y-axis.



[2] Sketch the curve symmetric to the given curve with respect to the line $y = x$.



[3] Sketch the curve symmetric to the given curve with respect to the origin.



■ **C. $f : f(x) = x^4$ is symmetric with respect to the y-axis. Prove this.**