

PS [T-11-05-08-21B]

Symmetry

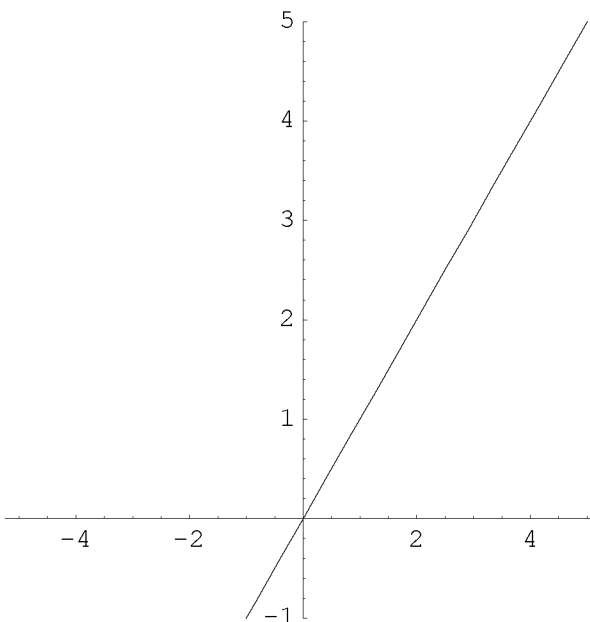
■ **A. Give the points which are symmetric to the following points**

- (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 $y = x$.

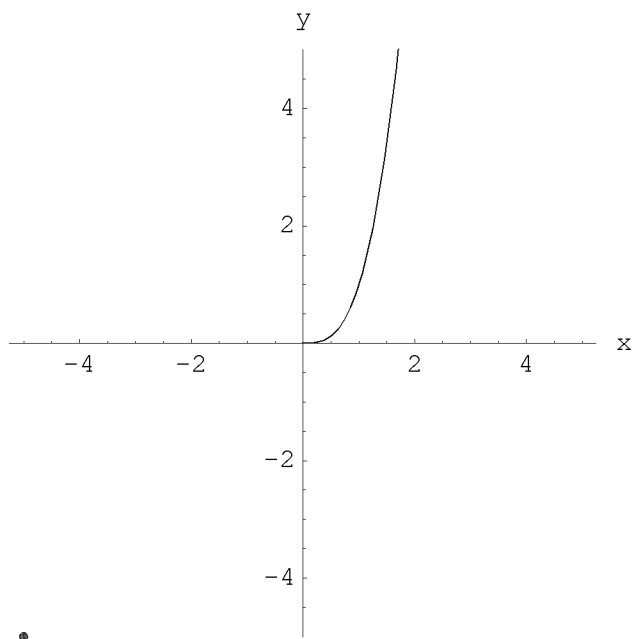
	y - axis	origin	x - axis	$y = x$
$(-5, 17)$				
$(14, 123)$				
$(-9, -8)$				
$(\pi, \sqrt{5})$				

■ **B. Sketch the line or curve.**

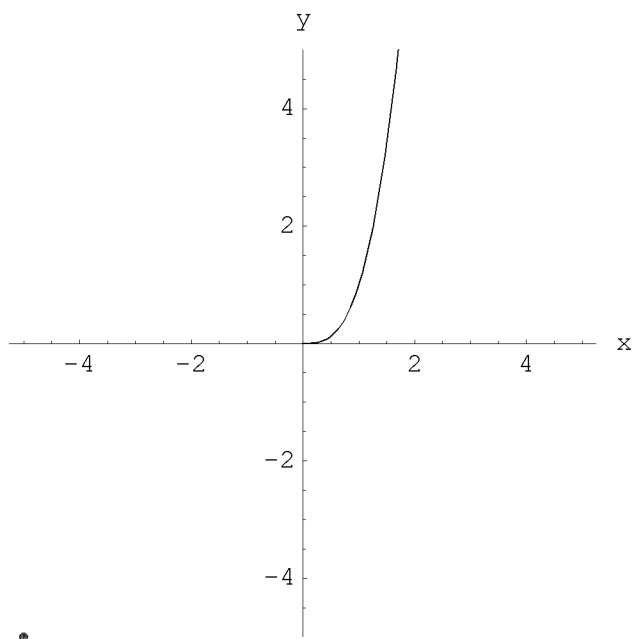
[1] Sketch the line symmetric to the given line with respect to the y -axis.



[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.