## Exercise 37

Graph the functions in Exercises 37-46. What symmetries, if any, do the graphs have? Specify the intervals over which the function is increasing and the intervals where it is decreasing.

$$
y=-x^{3}
$$

## Solution

The function is graphed below versus $x$.


It is symmetric with respect to the origin. The function is decreasing on $(-\infty, 0) \cup(0, \infty)$ and never increasing.

