

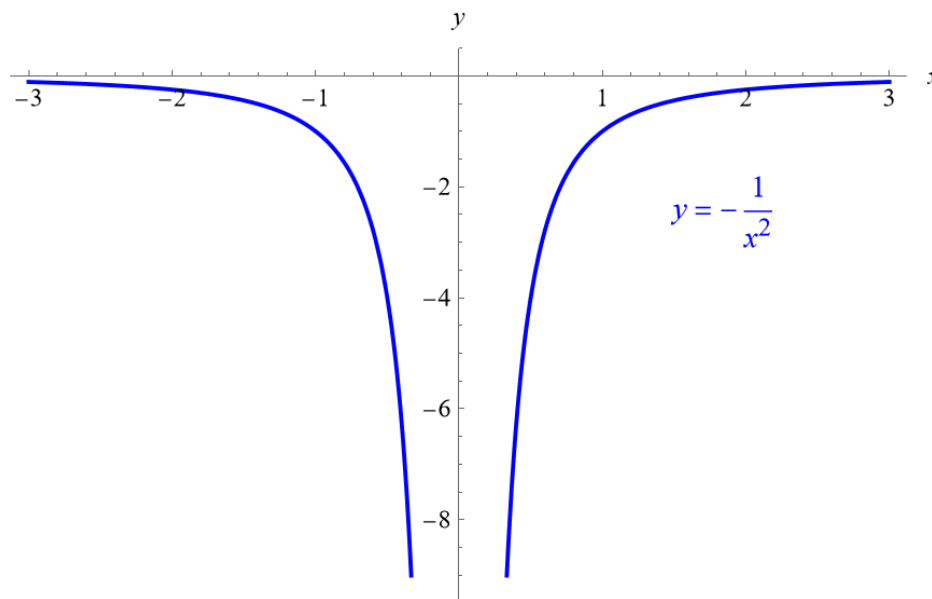
### Exercise 38

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.

$$y = -\frac{1}{x^2}$$

#### Solution

The function is graphed below versus  $x$ .



It is symmetric with respect to the  $y$ -axis. The function is decreasing on  $(-\infty, 0)$  and increasing on  $(0, \infty)$ .