

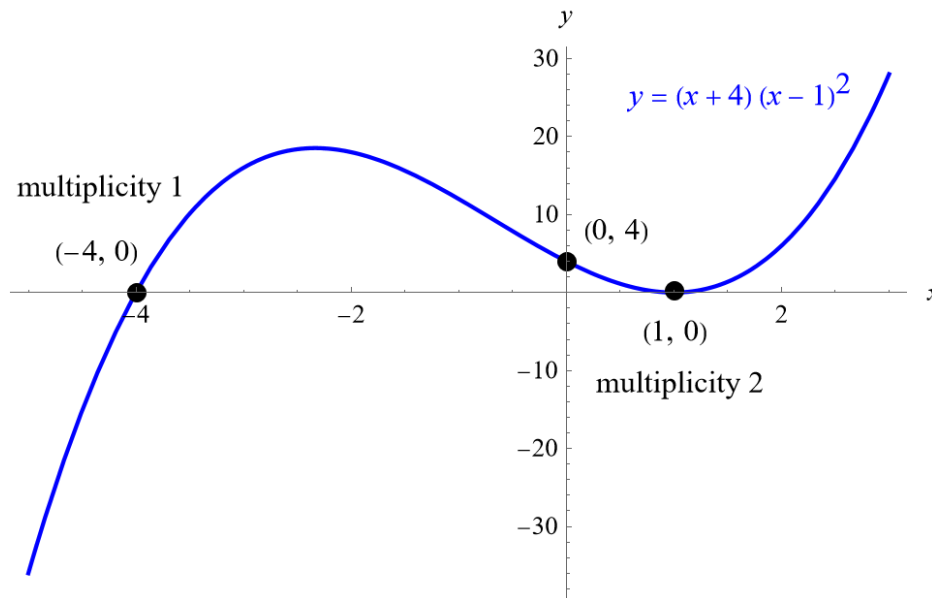
## Exercise 43

For the following exercises, graph the polynomial functions. Note  $x$ - and  $y$ - intercepts, multiplicity, and end behavior.

$$g(x) = (x + 4)(x - 1)^2$$

### Solution

Below is a graph of the function.



The end behavior is  $g(x) \rightarrow -\infty$  as  $x \rightarrow -\infty$  and  $g(x) \rightarrow \infty$  as  $x \rightarrow \infty$ .