

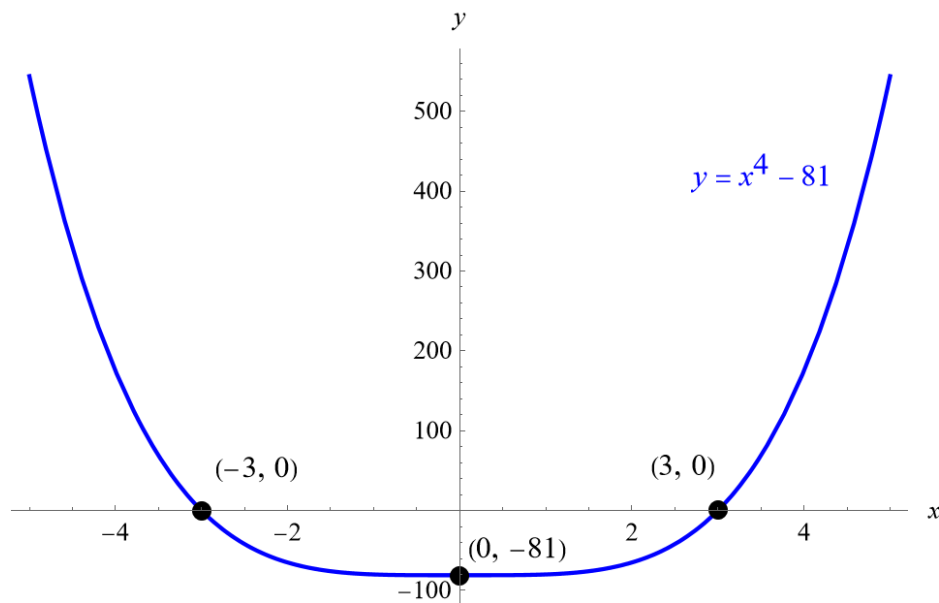
Exercise 57

For the following exercises, graph the polynomial functions using a calculator. Based on the graph, determine the intercepts and the end behavior.

$$f(x) = x^4 - 81$$

Solution

The function is graphed below, and the intercepts are labelled.



The end behavior is $f(x) \rightarrow \infty$ as $x \rightarrow \pm\infty$.