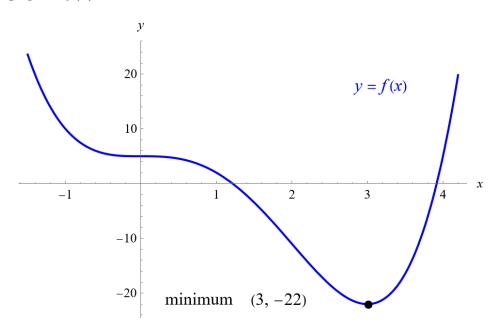
## Exercise 35

For the following exercises, use a graphing utility to estimate the local extrema of each function and to estimate the intervals on which the function is increasing and decreasing.

$$f(x) = x^4 - 4x^3 + 5$$

## Solution

Below is a graph of f(x) versus x.



The function is decreasing on  $(-\infty,0) \cup (0,3)$ , and the function is increasing on  $(3,\infty)$ .