## Exercise 42

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

$$
f(x)=(x+3)^{2}(x-2)
$$

## Solution

Below is a graph of the function.


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

