

## Exercise 65

The  $y$ -intercept is  $(0, 1)$ . There is no  $x$ -intercept. Degree is 4. End behavior: as  $x \rightarrow -\infty$ ,  $f(x) \rightarrow \infty$ , as  $x \rightarrow \infty$ ,  $f(x) \rightarrow \infty$ .

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### Solution

Try the simplest function.

$$f(x) = x^4 + 1$$

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

