## Exercise 10

Sketch the graph of an example of a function $f$ that satisfies all of the given conditions.

$$
\lim _{x \rightarrow 3} f(x)=-\infty, \quad \lim _{x \rightarrow \infty} f(x)=2, \quad f(0)=0, \quad f \text { is even }
$$

## Solution

Below is the graph of a function that satisfies these conditions.


