## Exercise 8

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

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

## Solution

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


