## Exercise 2

Use the given graph of $f$ to find a number $\delta$ such that

$$
\text { if } \quad 0<|x-3|<\delta \quad \text { then } \quad|f(x)-2|<0.5
$$



## Solution

As long as $\delta$ is less than 0.4 (and greater than zero, of course, so that the discontinuity doesn't matter), the distance from 2 on the $y$-axis will be less than 0.5 .

