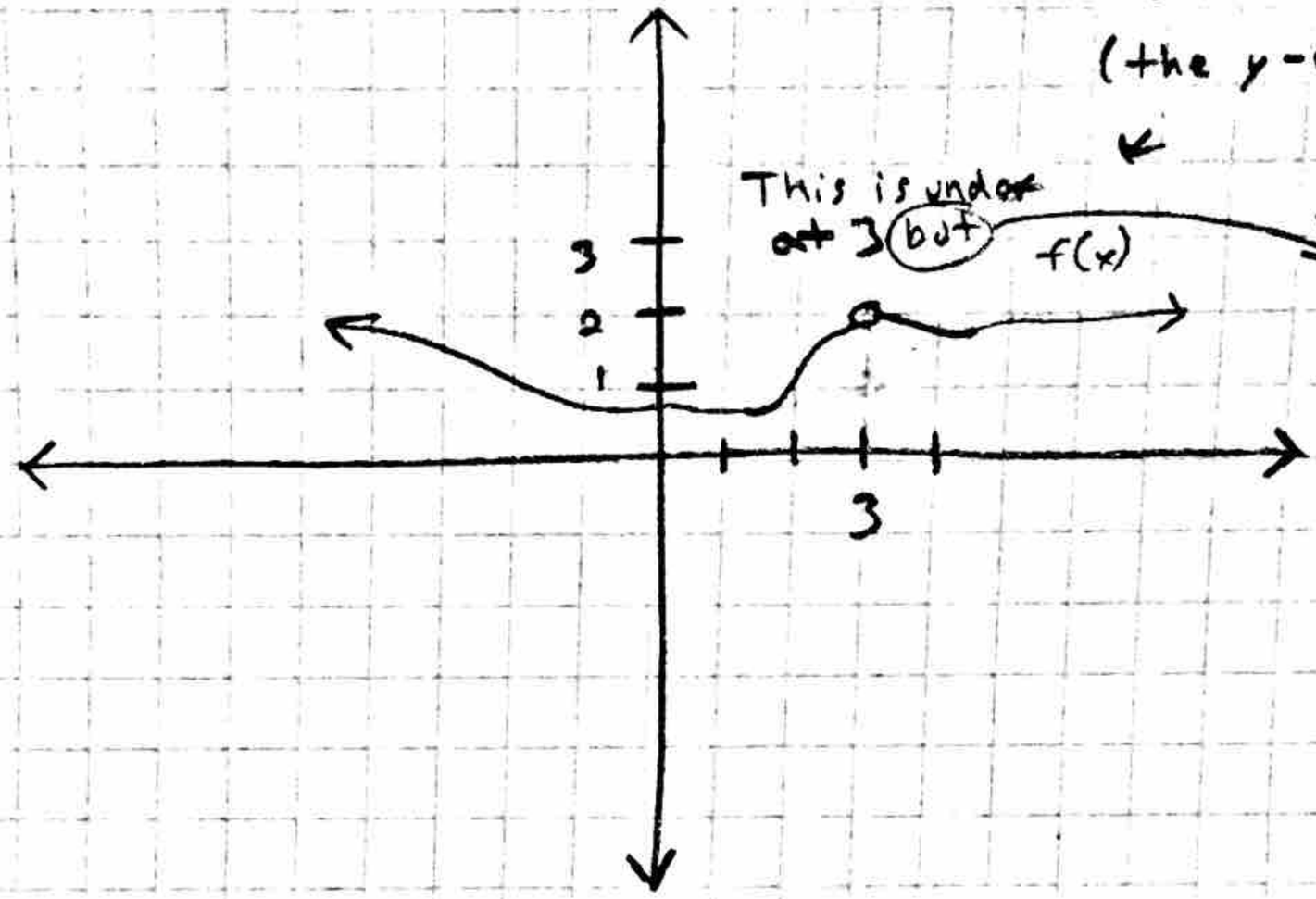
Finding Limits on a Graph



As 'x' gets closer to 3, f(x) (the y-values) get closer to 2

$\lim_{x \to 3} f(x) = 2$

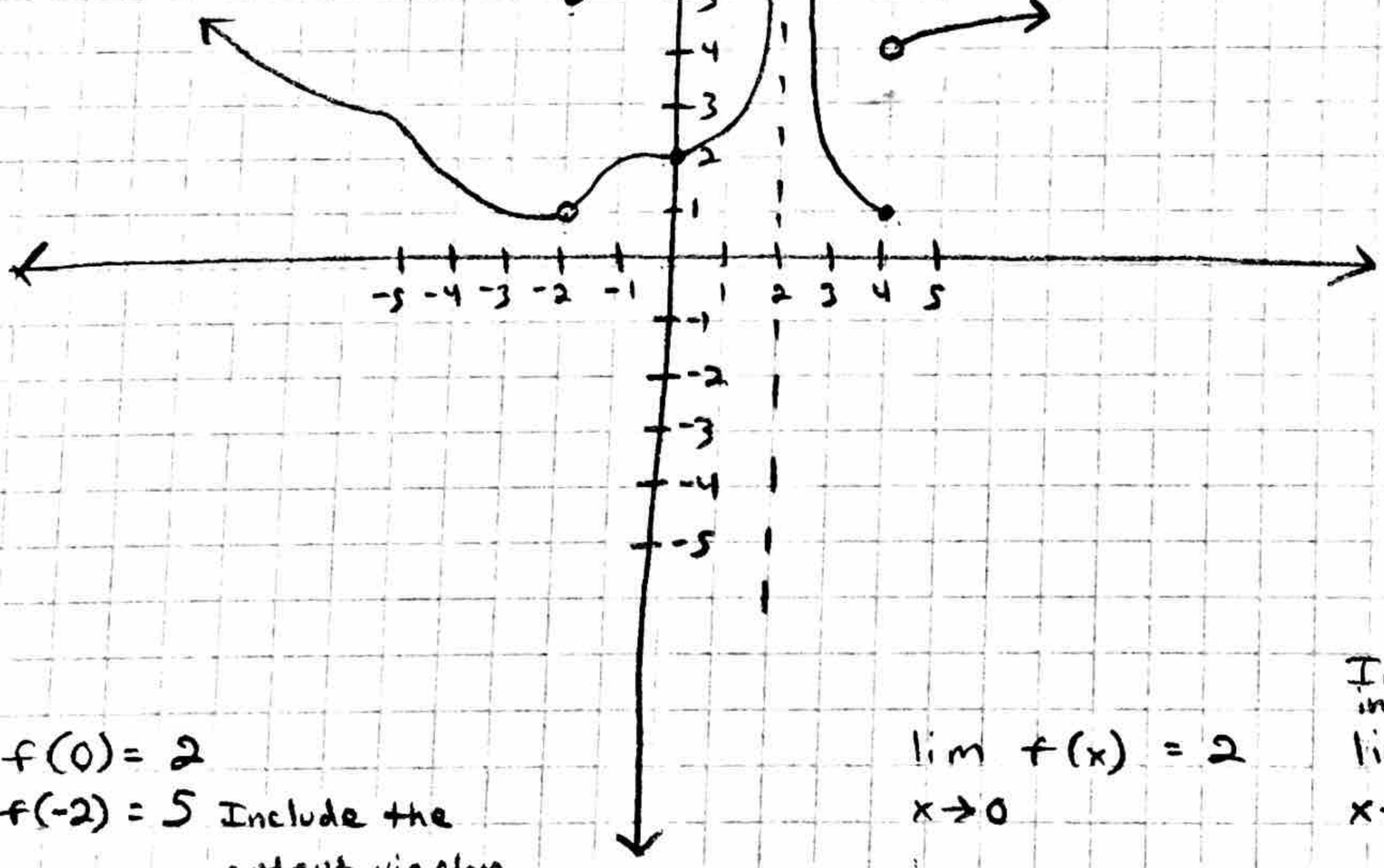
Even if f(x) is under at 3 the limit still gets close to 2.

$\lim_{x \to 2} f(x) = \infty$ The y values get bigger and bigger

$\lim_{x \to 4} f(x) =$ Limit does not exist

$\lim_{x \to 4^+} f(x) = 4$

$\lim_{x \to 4^-} f(x) = 1$



$f(4) = 1$

$f(0) = 2$

$f(-2) = 5$ Include the output via close circle ●

$\lim_{x \to 0} f(x) = 2$

Include the limit in open circle ○

$\lim_{x \to -2} f(x) = 1$

It does not matter if it is under at 2 what matters is what happens when it get close to 2.