

Exercise 1 Let $f(x) = \frac{1}{x+1}$ and $a = 2$. Observe the table of values for $\frac{f(a+h) - f(a)}{h}$:

h	$\frac{f(a+h) - f(a)}{h}$
-0.1	-0.114943
-0.01	-0.111483
0.01	-0.110742
0.1	-0.107527

The limit as $h \rightarrow 0$ is approximately -0.11.