

**Exercise 1** Let  $f(x) = -4x^2 + 5x - 1$  and  $a = -3$ . Observe the table of values for  $\frac{f(a+h) - f(a)}{h}$ :

$h$	$\frac{f(a+h) - f(a)}{h}$
-0.1	29.4
-0.01	29.04
0.01	28.96
0.1	28.6

The limit as  $h \rightarrow 0$  is approximately 29.