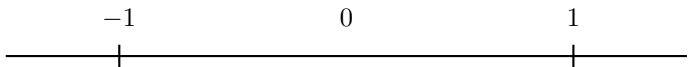
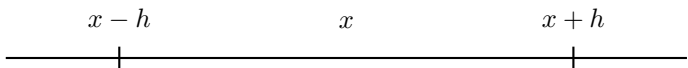


Input:  $f$ ,  $x$ , and  $g = (-1, 1)$ .

Grid:



Determine  $h$  and construct sampling points.



Sample.



$f(x - h)$

$f(x + h)$

Determine  $c = (c_1, c_2)$   
and estimate  $f'(x)$ .



$$f'(x) \approx \frac{-\frac{1}{2}f(x - h) + \frac{1}{2}f(x + h)}{h}$$