

6.1.1

$$\frac{f(x+h) - f(x)}{h} = \frac{x^2 - (x+h)^2}{2h} = -x - \frac{1}{2}h,$$

which is close to $-x$ if $|h|$ is small. Hence $f'(x) = -x$.

(a) -4 , (b) 5 .

$$y = 7 - 2x.$$