

(2)

$$\begin{aligned} & \lim_{x \rightarrow 0} \frac{f(x) - f(-x)}{x} \\ &= \lim_{x \rightarrow 0} \frac{f(x) - f(0) - f(-x) + f(0)}{x} \\ &= \lim_{x \rightarrow 0} \frac{f(x) - f(0)}{x} + \lim_{x \rightarrow 0} \frac{f(-x) - f(0)}{-x} \\ &= 2f'(0) = 2a \end{aligned}$$