連鎖率

若 $f(x)=\frac{1}{\sqrt[3]{(x^2-1)^2}}$，求 $f'(x)$

$\therefore f(x)=(x^2-1)^{-\frac{2}{3}}$

$\therefore f'(x)=-\frac{2}{3}(x^2-1)^{-\frac{2}{3}-1}\times\frac{d}{dx}(x^2-1)$

$=-\frac{2}{3}(x^2-1)^{-\frac{5}{3}}\times 2x$

$=\frac{-4x}{3\sqrt[3]{(x^2-1)^5}}$