

5.16 Soit $n \in \mathbb{Q}$. Posons $g(x) = x^n$. Alors $g'(x) = n x^{n-1}$ et $f^n(x) = (g \circ f)(x)$.

$$(f^n(x))' = \left((g \circ f)(x) \right)' = g'(f(x)) \cdot f'(x) = n f^{n-1}(x) \cdot f'(x)$$