## 13. Differentiation

Exercise 13.1. Show that if $f$ is differentiable at $x_{0}$ then $f$ is continuous at $x_{0}$.

Exercise 13.2. Use the chain rule to compute the derivative of

$$
g:[0, \infty) \rightarrow[0, \infty), g(x)=x^{1 / n}, \text { with } n \in \mathbb{N}^{*}
$$

