

Analysis in \mathbb{R}^n
Math 203, Section 30
Autumn Quarter 2007
Written Exercises from Tuesday, September 25

Exercise 0.0.1 Prove that if $f : (a, b) \rightarrow \mathbb{R}$ is differentiable and $f'(x) = 0$ for every $x \in (a, b)$, then there is some constant $c \in \mathbb{R}$ such that $f(x) = c$ for every $x \in (a, b)$.

Exercise 0.0.2 Write the statement and proof of both parts of the Fundamental Theorem of Calculus.