

MA 1124 - Assignment 9

1. Prove the Bolzano-Weierstrass Theorem given that every Cauchy sequence $(x_n)_{n=0}^{\infty}$ in $\mathbb{R}^n$ converges.
2. Prove the Heine-Borel Theorem given that every Cauchy sequence $(x_n)_{n=0}^{\infty}$ in $\mathbb{R}^n$ converges.