M405 - HOMEWORK SET #3- DUE 02/22/19

- **pg. 48-50: 2, 3, 6, 9**
- **pg. 55-56: 2, 3, 7, 10**
- Let $\{x_i\}$, $\{y_i\}$ be convergent sequences in $\mathbb{R}$. Prove that

$$(\lim_{i\to\infty} x_i) \cdot (\lim_{i\to\infty} y_i) = \lim_{i\to\infty} x_i \cdot y_i$$