

# Numerische Mathematik

## X. Übungsserie

**Aufgabe X.1:**

not done yet!

**Aufgabe X.2:**

$$i = k \implies L_i(t_k) = \prod_{j=0, j \neq i}^n \frac{t_i - t_j}{t_i - t_j} = 1$$
$$i \neq k \implies L_i(t_k) = \prod_{j=0, j \neq i}^n \frac{t_k - t_j}{t_i - t_j} = \frac{t_k - t_k}{t_i - t_k} \prod_{j=0, j \neq i, j \neq k}^n \frac{t_k - t_j}{t_i - t_j} = 0$$