

$$\langle f, g \rangle = \int_0^1 w(x) \cdot f(x) g(x) dx \quad w(x) = x$$

Cięg wiel. ortog. P_0, P_1, \dots, P_n

$$w_n^*(f) = \sum_{i=0}^n \frac{\langle f, P_i \rangle}{\langle P_i, P_i \rangle} P_i(x)$$

$$w_{n+1}^*(f) = \sum_{i=0}^{n+1} \underbrace{\quad}$$

$$P_0(x) = \alpha_0 \quad P_1(x) = (\alpha_1 x - \beta_1) P_0(x)$$

$$P_k(x) = (\alpha_k x - \beta_k) P_{k-1}(x) - \gamma_k P_{k-2}$$

$$a) \underbrace{\alpha_k, \beta_k, \gamma_k = ?}_{\text{do 5.XII}} \quad b) \underbrace{\text{jak wyznaczyć } \langle f, g \rangle}_{\text{do 10.XII}}$$

tekst w TeXu