

HW6

1. pp. 84-87 in the textbook: problems 5(a),14,17.
2. Let T be the operator of differentiation in the space $P_{45}(\mathbb{R})$ of polynomials of degree at most 45. Find the matrix of T^{23} in the standard basis which is $\{1, x, \dots, x^{45}\}$.
3. pp. 107-110 in the textbook: problems 2(a,d,f).

Remark. Each problems is worth 1 point, the problems with the star are worth 2 points. You can use any statement proved in class without reproving it.