HW 6 PROBLEMS

From Rudin Chapter 7 solve 15,16,19,20,22. Also solve the following problems:

Problem 1. Given $f: \mathbb{R} \to \mathbb{R}$ assume that there is a sequence of polynomials such that $\lim_{n\to} P_n(x) = f(x)$ uniformly on \mathbb{R} . Prove that f is a polynomial.