Math 1190 Homework #12

We will talk about these problems on Monday, November 30th.

Problem 1: Suppose $p(x)$ is a polynomial of degree 7 such that $(x-1)^4$ is a factor of $p(x)+1$ and $(x+1)^4$ is a factor of $p(x)-1$. Find $p(x)$.

Problem 2: When 4444^{4444} is written in decimal notation, the sum of its digits is A. Let B be the sum of the digits of A. Find the sum of the digits of B.