

Name: _____

Score: _____

Directions: Please answer in the space provided. No calculators. Please put all phones, etc., away.

1. Suppose $S = \{1 + 2x, 1 + x + x^2 + x^3, 1 - 2x + x^3, x + 2x^2\}$. Is S a basis for P_3 ? Why or why not?