

Class Exercise 1

- Write the following 2 polynomials in Horner's Nested form:
- $p(x) = -5 + 3x + 8x^2 - 2x^4$
- Problem 8c (Section 1.1, page 15)
$$p(x) = 6(x + 2)^3 + 9(x + 2)^7 + 3(x + 2)^{15} - (x + 2)^{31}$$

- Problem 1: Calculate $p(2)$ for the following polynomial using Horner's Table

$$p(x) = x^4 - 4x^3 + 7x^2 - 5x - 2 \text{ at } x = 2$$

- Problem 2: Page 16, Exercise 18a (Section 1.1)

$$p(x) = 2x^4 + 9x^2 - 16x + 12 \text{ at } x = -6$$

- Page 16, Exercise 18b (Section 1.1) Calculate $p(2)$ and $p'(2)$ using Horner's Tables

$$p(x) = 2x^4 - 3x^3 - 5x^2 + 3x + 8 \text{ at } x = 2$$