

Homework: Introduction to Polynomials

Unit 12 Day 1

Naming Polynomials

Name each polynomial based on its degree and number of terms.

1) $2x^2$ **Monomial (one term)
and Quadratic (degree=2)**

2) $-10k^2 + 7$

3) $-5n^3 + 10n - 10$

4) $8a^3$

5) $6n$

6) 1 **Constant, monomial**

7) $-9n + 10$

8) $5a^2 - 6a + 2$

9) $8p^3 - 2p^2 - 7$

10) $-7n^2 + 7n$

11) $5n^3 - 2n^2 - 8n$

12) $4v^3 - 1$

13) $9x^2 + 3x + 8$ **Quadratic, Trinomial**

14) -6

Adding and Subtracting Polynomials

Simplify each expression. Write answers in standard form.

15) $(7 - 13x^3 - 11x) - (2x^3 + 8 - 4x^5)$

16) $(8b^3 - 6 + 3b^4) - (b^4 - 7b^3 - 3)$

$$-2x^3 - 8 + 4x^5$$

$$-b^4 + 7b^3 + 3$$

$$4x^5 - 15x^3 - 11x - 1$$

$$2b^4 + 15b^3 - 3$$

↑
only one
with x^5 ,
stays the
same.

↑
only term
with just x ,
stays the same.

↑
watch
signs!

$$\underline{\underline{-b + 3}}$$