

## Adding and Subtracting Polynomials

Date \_\_\_\_\_

**Simplify each expression.**

1)  $(2x^3 + 6x^2) + (8x^3 + 8x^2)$

2)  $(2n^2 - 8 + 5n^4) - (6n^4 - 5n^2 + 4)$

3)  $(5k^2 + 5k^4 + 8k) + (2k^2 + 3 + 5k + 4k^4)$

4)  $(6n + 5 - 2n^3) + (8 - 7n^3 + n)$

5)  $(8n^3 + 8n) - (1 - 8n - 2n^3)$

6)  $(3n - 3n^2 - 8) + (7n + 3n^2 - 3n^3) + (4 + 2n - 3n^2)$

## Answers to Adding and Subtracting Polynomials

1)  $10x^3 + 14x^2$

5)  $10n^3 + 16n - 1$

2)  $-n^4 + 7n^2 - 12$

6)  $-3n^3 - 3n^2 + 12n - 4$

3)  $9k^4 + 7k^2 + 13k + 3$

4)  $-9n^3 + 7n + 13$