Adding/Subtracting Polynomials Practice Date_____ Period____

Simplify each expression.

1) $(2x^2 - 8x^4) - (4x^2 - 8)$

2) $(3 - 3b^4 + 8b^4 + 7b^2)$

$5b^4 + 7b^2 + 3$

3) $(4x^4 + 6x^3 + 6x^3 + 8x^4)$

$12x^4 + 12x^3$

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

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

6) $(5x^3 + x^2 + 0x - 3x^3 - 3)$

$2x^3 + 2x - 3$

We will focus on adding for now.

- When adding you are combining like terms.
- You know you are adding because of the plus sign in the middle of the parenthesis

Adding/Subtracting Polynomials Practice

Date_____ Period____

Simplify each expression.

Subtract

1) $(2x^2 - 8x^4) - (4x^2 - 8)$

① Dist. Neg

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

② Rewrite Expression

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

③ Combine Like terms

2) $(3 - 3b^4) + (8b^4 + 7b^2)$

3) $(4x^4 + 6x^3) + (6x^3 + 8x^4)$

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

$6n^4 - 8 - 7 + 5n^4 + 7n^3$

$11n^4 + 7n^3 - 15$

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

$6k^2 - \cancel{7k^3} - k + \cancel{7k^3} - 4k^2$

$2k^2 - k$

6) $(5x^3 + x) + (x - 3x^3 - 3)$

7) $(6x^4 - 4x + x^2) + (2x - 2x^2 - 8x^4)$

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