Homework 2.2 - Adding and Subtracting Polynomials

Date_____

Add and/or subtract the polynomials. Make sure your answer is in descending order.

1) $(6p^3 + 3p^2 + 7p) + (7p^2 + 2p^3 + 3p)$

$8p^3 + 10p^2 + 10p$

2) $(5p^3 - 3p^2 - 1) - (p^3 + p^2)$

$4p^3 - 4p^2 - 1$

3) $(4v^4 + 5v^3) + (4v^4 - 2v) + (4v + v^4)$

$9v^4 + 5v^3 + 2v$

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

$x^4 + 8x^3 + 2x^2 - 7x$

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

$5k^4 + 7k^3 + 3k^2 + k + 8$

6) $(3.7p^2 - 5.3p^3) + (2.2p^2 - 5p^3)$

$-10.3p^3 + 5.9p^2$

7) $(4.92 + 6n^2 + 2.71n) - (2.7n + 2.6n^2)$

$3.4n^2 + 0.01n + 4.92$

8) $(v^4 - 3.1 + 5v) + (8v^4 - 7.4) - (5.6v^4 + 5.28)$

$3.4v^4 + 5v - 15.78$

9) $(3x^2 - 3x^3) + (4x^2 - 7x^3 - 8x^4 + 3) + (6x^3 + 8)$

$-8x^4 - 4x^3 + 7x^2 + 11$

10) $(k^3 - 7 + 8k) + (5k + 5k^3 - 7)$

$6k^3 + 13k - 14$

11) $(48k^2 - 96k - 72k^3 - 79) - (58k^2 - 61 + 99k - 22k^3) + (45 + 62k - 88k^3 - 23k^2)$

$-138k^3 - 33k^2 - 133k + 27$

Subtract the polynomials. First write the algebraic expression.

12) Subtract $8k + 2 + k^3$ from $2k - k^3 + 4$

$-2k^3 - 6k + 2$

13) Subtract $2 - 5r - 5r^3 - 8r^2$ from $7 - 2r$

$5r^3 + 8r^2 + 3r + 5$

14) Subtract $6n^2 - 5n^3 - 5$ from $3n^2 - 4n^3 - 2$

$n^3 - 3n^2 + 3$

15) Subtract $7x^2 + 8x$ from $x^2 - 2x$

$-6x^2 - 10x$