

Homework 2.2 - Adding and Subtracting Polynomials

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

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

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

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

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

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

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

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

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

$$9) (3x^2 - 3x^3) + (4x^2 - 7x^3 - 8x^4 + 3) + (6x^3 + 8) \quad 10) (k^3 - 7 + 8k) + (5k + 5k^3 - 7)$$

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

Subtract the polynomials. First write the algebraic expression.

$$12) \text{ Subtract } 8k + 2 + k^3 \text{ from } 2k - k^3 + 4$$

$$13) \text{ Subtract } 2 - 5r - 5r^3 - 8r^2 \text{ from } 7 - 2r$$

$$14) \text{ Subtract } 6n^2 - 5n^3 - 5 \text{ from } 3n^2 - 4n^3 - 2$$

$$15) \text{ Subtract } 7x^2 + 8x \text{ from } x^2 - 2x$$