

## WS Add/Subtract Polynomials

Date \_\_\_\_\_

Period \_\_\_\_\_

**Simplify. Leave your answers in standard form.**

1)  $(4x^4 - 2x + 7x^3) + (-5x - 7x^3 + 8x^4)$

$12x^4 - 7x$

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

$-9x^4 + x^2 - 2x$

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

$-8n^4 + 4n^3 + 9n + 3$

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

$-a^4 + 3a^3 - 7a^2 + 5$

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

$-n^3 + 3n^2$

6)  $(-6xy^3 + 3x^2 + 3x^4y^2) + (7xy^3 - 4x^2 - 7x^4y^2)$

$-4x^4y^2 + xy^3 - x^2$

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

$8x^4y^4 + 6x^4y^2 - 4x^4y$

8)  $(3x^4y - xy^4 + x^3) + (2x^3 + x^4y - 4xy^4)$

$4x^4y - 5xy^4 + 3x^3$

9)  $(6b^4 - 3a^3b^2 - 8a^2b) + (6a^4b - 2a^3b^2 - b^4)$

$-5a^3b^2 + 6a^4b + 5b^4 - 8a^2b$

10)  $(-x^4y^4 - 2x^2y - 7y^3) + (-x^2y + 2x^4y^4 + 3y^4)$

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

$$11) (7 + 5n^4 - 4n^3) - (3 + 6n^4 + 5n^3) \\ -n^4 - 9n^3 + 4$$

$$12) (-6 + 3x^3 - 4x^4) - (-4x^4 + 5 - x^2) \\ 3x^3 + x^2 - 11$$

$$13) (-n^2 - 1 - 3n^4) - (5n^4 - 5n^2 - 2) \\ -8n^4 + 4n^2 + 1$$

$$14) (4x + 6x^2 + x^4) - (-7x^4 + 8x^2 + 3x) \\ 8x^4 - 2x^2 + x$$

$$15) (-7r + 5 + 5r^4) - (8 + r + 3r^4) \\ 2r^4 - 8r - 3$$

$$16) (-8v^4 + 3u^2v^4 - 8u^4v^3) - (4u^2v^4 + v^4 - 6) \\ -8u^4v^3 - u^2v^4 - 9v^4 + 6$$

$$17) (5x^4y^4 - 4x^4y - 5x^4) - (4x^4y + 2xy^3 - 4x^4y^4) \\ 9x^4y^4 - 8x^4y - 5x^4 - 2xy^3$$

$$18) (-7u^4v^4 + 6u^2 - u^3v^4) - (2u^4v^4 - u^2 + 2u^3v^4) \\ -9u^4v^4 - 3u^3v^4 + 7u^2$$

$$19) (-3a^4b^2 - 2a^2b - 3b^2) - (-6a^2b - 6a^3b^3 - 7b^2) \\ -3a^4b^2 + 6a^3b^3 + 4a^2b + 4b^2$$

$$20) (-8a^3b^2 + 6a^2b^3 - 2a^3b^4) - (6a^3b^2 + 3a^4b^3 - 6a^2b^3) \\ -2a^3b^4 - 3a^4b^3 - 14a^3b^2 + 12a^2b^3$$