Geometry

Name_____

Adding and Subtracting Polynomials

Simplify each expression.

1) $\left(8p^3 + p - 5p^2\right) + \left(1 - 7p - 3p^2\right)$

2) $\left(8 + 5p^4 - p\right) - \left(7p - 6 + 5p^4\right)$

3) $\left(8m^4 + 8 - 2m^2\right) - \left(7m^3 - m^4 - m^2\right)$

4) $\left(7v^2 + 4v^3 + 3v\right) + \left(3v^4 - 2v^2 + 2v\right)$

5) $\left(2 - 4k\right) - \left(7k - 4 + 2k^2\right)$

6) $\left(n - 3n^3\right) - \left(4n^3 - 3n^2 - 7n\right)$

7) $\left(4x^3 - 6x^4\right) + \left(5x^3 + x + 7x^4\right)$

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

9) $\left(-7m^3 - 5 + 8m\right) + \left(5m^3 - 8m - 6m^4\right)$

10) $\left(-5x^3 - 8x^4 - 6x\right) - \left(7x - 6x^3 + 4x^4\right)$

11) $\left(3n + 4n^4 - 1\right) + \left(-1 + 5n^4 + 7n\right)$

12) $\left(2n^4 - 8n^2 - 6n\right) - \left(8n^4 + 2n - 6n^2\right)$

Adding and Subtracting Polynomials

Simplify each expression.

1) $\left(8p^3 + p - 5p^2\right) + \left(1 - 7p - 3p^2\right)$

$\quad 8p^3 - 8p^2 - 6p + 1$

2) $\left(8 + 5p^4 - p\right) - \left(7p - 6 + 5p^4\right)$

$\quad -8p + 14$

3) $\left(8m^4 + 8 - 2m^2\right) - \left(7m^3 - m^4 - m^2\right)$

$\quad 9m^4 - 7m^3 - m^2 + 8$

4) $\left(7v^2 + 4v^3 + 3v\right) + \left(3v^4 - 2v^2 + 2v\right)$

$\quad 3v^4 + 4v^3 + 5v^2 + 5v$

5) $\left(2 - 4k\right) - \left(7k - 4 + 2k^2\right)$

$\quad -2k^2 - 11k + 6$

6) $\left(n - 3n^3\right) - \left(4n^3 - 3n^2 - 7n\right)$

$\quad -7n^3 + 3n^2 + 8n$

7) $\left(4x^3 - 6x^4\right) + \left(5x^3 + x + 7x^4\right)$

$\quad x^4 + 9x^3 + x$

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

$\quad -12n^4 + 6n^2 + 2n + 5$

9) $\left(-7m^3 - 5 + 8m\right) + \left(5m^3 - 8m - 6m^4\right)$

$\quad -6m^4 - 2m^3 - 5$

10) $\left(-5x^3 - 8x^4 - 6x\right) - \left(7x - 6x^3 + 4x^4\right)$

$\quad -12x^4 + x^3 - 13x$

11) $\left(3n + 4n^4 - 1\right) + \left(-1 + 5n^4 + 7n\right)$

$\quad 9n^4 + 10n - 2$

12) $\left(2n^4 - 8n^2 - 6n\right) - \left(8n^4 + 2n - 6n^2\right)$

$\quad -6n^4 - 2n^2 - 8n$