Name : _____

Subtracting Polynomials

Single-variable: L1S1

Arrange and subtract the polynomials.

1) $(2x^4 + 5x^6 - 13x - 7) - (28 - 6x^4 + 4x^6)$

2) $(-32u - 3u^2 - 7u^4) - (-3u^2 - 7u^4 - 10u^3 - 32u)$

3) $(16a^4 - 11a^5 + a - 15 + 3a^2) - (23a^3 - 9a - 4)$

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

5) $(5n^2 + 19n^3 - 27n) - (-20n^2 + 19n^3 - 39n)$

6) $(15p^5 + 26 + 9p^4) - (9p^4 - p^5 - 7p^3 - 6p^2 + 26)$

7) $(17k - 34k^3 - 20k^2 + 6) - (5k^2 + 1 + 18k + 22k^4)$

8) $(-7c^2 - 2c - c^6 - 9 - 3c^3) - (2 - 3c^3 - 7c^2 - c^6)$

Name : _____

Answer key

Subtracting Polynomials

Single-variable: L1S1

Arrange and subtract the polynomials.

1) $(2x^4 + 5x^6 - 13x - 7) - (28 - 6x^4 + 4x^6)$

$5x^6 + 2x^4 - 13x - 7$
$(-)\ 4x^6 - 6x^4 + 28$
$x^6 + 8x^4 - 13x - 35$

2) $(-32u - 3u^2 - 7u^4) - (-3u^2 - 7u^4 - 10u^3 - 32u)$

$-7u^4 - 3u^2 - 32u$
$(-)\ -7u^4 - 10u^3 - 3u^2 - 32u$
$10u^3$

3) $(16a^4 - 11a^5 + a - 15 + 3a^2) - (23a^3 - 9a - 4)$

$-11a^5 + 16a^4 + 3a^2 + a - 15$
$(-)\ 23a^3 - 9a - 4$
$-11a^5 + 16a^4 - 23a^3 + 3a^2 + 10a - 11$

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

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

5) $(5n^2 + 19n^3 - 27n) - (-20n^2 + 19n^3 - 39n)$

$19n^3 + 5n^2 - 27n$
$(-)\ 19n^3 - 20n^2 - 39n$
$25n^2 + 12n$

6) $(15p^5 + 26 + 9p^4) - (9p^4 - p^5 - 7p^3 - 6p^2 + 26)$

$15p^5 + 9p^4 + 26$
$(-)\ -p^5 + 9p^4 - 7p^3 - 6p^2 + 26$
$16p^5 + 7p^3 + 6p^2$

7) $(17k - 34k^3 - 20k^2 + 6) - (5k^2 + 1 + 18k + 22k^4)$

$-34k^3 - 20k^2 + 17k + 6$
$(-)\ 22k^4 + 5k^2 + 18k + 1$
$-22k^4 - 34k^3 - 25k^2 - k + 5$

8) $(-7c^2 - 2c - c^6 - 9 - 3c^3) - (2 - 3c^3 - 7c^2 - c^6)$

$-c^6 - 3c^3 - 7c^2 - 2c - 9$
$(-)\ -c^6 - 3c^3 - 7c^2 + 2$
$-2c - 11$