

6.1- 6.3 review

Date _____ Period _____

Simplify each expression.

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

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

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

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

Find each product.

5) $(2n - 4)(-n - 4)$

6) $(2n - 1)(-n + 5)$

7) $(8n^2 + 7n - 2)(3n + 1)$

8) $(-2x^2 + 4x - 4)(-6x^2 - 5x - 1)$

Expand completely.

9) $(v + 2u)^6$

10) $(2x - 1)^3$

Find each term described.

11) 3rd term in expansion of $(2v - 1)^4$

12) 2nd term in expansion of $(2x - 4y)^3$

13) 4th term in expansion of $(y - x)^7$

14) 6th term in expansion of $(a + b)^5$

Answers to 6.1- 6.3 review (ID: 1)

- 1) $6x^3 + 11x^2 + 6x$ 2) $-2n^3 + 11n^2 + 2$ 3) $-2x^5 - 5x^3 - 9x^2 + 10x + 11$
4) $8a^4 + 3a^3 - 8a^2 - 5a$ 5) $-2n^2 - 4n + 16$ 6) $-2n^2 + 11n - 5$
7) $24n^3 + 29n^2 + n - 2$ 8) $12x^4 - 14x^3 + 6x^2 + 16x + 4$
9) $v^6 + 12v^5u + 60v^4u^2 + 160v^3u^3 + 240v^2u^4 + 192vu^5 + 64u^6$
10) $8x^3 - 12x^2 + 6x - 1$ 11) $24v^2$ 12) $-48x^2y$
13) $-35y^4x^3$ 14) b^5