

8-1 to 8-3 (#1)

Kuta Software - Infinite Algebra 1

Name _____

Multiplying Polynomials

Date _____ Period _____

Find each product.

1) $6v(2v + 3)$

2) $7(-5v - 8)$

3) $2x(-2x - 3)$

4) $-4(v + 1)$

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

6) $(4n + 1)(2n + 6)$

7) $(x - 3)(6x - 2)$

8) $(8p - 2)(6p + 2)$

Simplify each expression.

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

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

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

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

8-1 to 8-3 (#2)

Kuta Software - Infinite Algebra 1

Name _____

Adding and Subtracting Polynomials

Date _____ Period _____

5) $(3a^2 + 1) - (4 + 2a^2)$

14) $(7x - 6)(5x + 6)$

7) $(5a + 4) - (5a + 3)$

16) $(8n + 1)(6n - 3)$

9) $(-4k^4 + 14 + 3k^2) + (-3k^4 - 14k^2 - 8)$

11) $(12a^5 - 6a - 10a^3) - (10a - 2a^5 - 14a^4)$

18) $(3x - 4)(4x + 3)$

13) $(-x^4 + 13x^5 + 6x^3) + (6x^3 + 5x^5 + 7x^4)$

20) $(7k - 3)(k^2 - 2k + 7)$

15) $(13n^2 + 11n - 2n^4) + (-13n^2 - 3n - 6n^4)$

extra 4

① $4(2x - 3) + 6$

② $4x(x - 6) + 2x - 1$

③ $x^2(x - 2) - x^2 + 4x^3$

④ $x(2x + 1) - 3(x + 7)$

Kuta #3

Name _____

$$6) (4r^3 + 3r^4) - (r^4 - 5r^3)$$

$$13) (4p - 1)^2$$

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

$$15) (6n + 3)(6n - 4)$$

$$10) (3 - 6n^5 - 8n^4) - (-6n^4 - 3n - 8n^5)$$

$$12) (8n - 3n^4 + 10n^2) - (3n^2 + 11n^4 - 7)$$

$$17) (6k + 5)(5k + 5)$$

$$14) (9r^3 + 5r^2 + 11r) + (-2r^3 + 9r - 8r^2)$$

$$19) (4a + 2)(6a^2 - a + 2)$$

$$16) (-7x^5 + 14 - 2x) + (10x^4 + 7x + 5x^5)$$

Extra

$$\textcircled{1} 4(x+3) + 10x - 7$$

$$\textcircled{2} x(x+4) + 2(x+9)$$

$$\textcircled{3} x^2(x-4) + 3x(x^2+x-2)$$

$$21) (7r^2 - 6r - 6)(2r - 4)$$

$$23) (6n^2 - 6n - 5)(7n^2 + 6n - 5)$$

Find each sum or difference.

11. $(6x^3 - 4) + (-2x^3 + 9)$

12. $(g^3 - 2g^2 + 5g + 6) - (g^2 + 2g)$

13. $(4 + 2a^2 - 2a) - (3a^2 - 8a + 7)$

14. $(8y - 4y^2) + (3y - 9y^2)$

15. $(-4z^3 - 2z + 8) - (4z^3 + 3z^2 - 5)$

16. $(-3d^2 - 8 + 2d) + (4d - 12 + d^2)$

17. $(y + 5) + (2y + 4y^2 - 2)$

18. $(3n^3 - 5n + n^2) - (-8n^2 + 3n^3)$

34. $(2c^2 + 6c + 4) + (5c^2 - 7)$

35. $(2x + 3x^2) - (7 - 8x^2)$

36. $(3c^3 - c + 11) - (c^2 + 2c + 8)$

37. $(z^2 + z) + (z^2 - 11)$

38. $(2x - 2y + 1) - (3y + 4x)$

39. $(4a - 5b^2 + 3) + (6 - 2a + 3b^2)$

40. $(x^2y - 3x^2 + y) + (3y - 2x^2y)$

41. $(-8xy + 3x^2 - 5y) + (4x^2 - 2y + 6xy)$

42. $(5n - 2p^2 + 2np) - (4p^2 + 4n)$

43. $(4rxt - 8r^2x + x^2) - (6rx^2 + 5rxt - 2x^2)$

Alg

Sec 8-2 A

Name _____

Find each product.

1. $5w(-3w^2 + 2w - 4)$

2. $6g^2(3g^3 + 4g^2 + 10g - 1)$

3. $4km^2(8km^2 + 2k^2m + 5k)$

4. $-3p^4r^3(2p^2r^4 - 6p^6r^3 - 5)$

5. $2ab(7a^4b^2 + a^5b - 2a)$

6. $c^2d^3(5cd^7 - 3c^3d^2 - 4d^3)$

18. $b(b^2 - 12b + 1)$

19. $f(f^2 + 2f + 25)$

20. $-3m^3(2m^3 - 12m^2 + 2m + 25)$

21. $2j^2(5j^3 - 15j^2 + 2j + 2)$

22. $2pr^2(2pr + 5p^2r - 15p)$

23. $4t^3u(2t^2u^2 - 10tu^4 + 2)$

IXL: Z6