

9.3 Practice A

Multiply binomials.

1) $(5n+5)(5n-5) = 25n^2 - 25n + 25n - 25 = 25n^2 - 25$

2) $(6n+3)(6n-3) = 36n^2 - 18n + 18n - 9 = 36n^2 - 9$

3) $(5x-8)^2 = (5x-8)(5x-8) = 25x^2 - 40x - 40x + 64 = 25x^2 - 80x + 64$

EXPAND

4) $(2x-6)^2 = (2x-6)(2x-6) = 4x^2 - 12x - 12x + 36 = 4x^2 - 24x + 36$

5) $(2n-7)(2n+7) = 4n^2 + 14n - 14n - 49 = 4n^2 - 49$

6) $(4n-3)(4n+3) = 16n^2 + 12n - 12n - 9 = 16n^2 - 9$

7) $(7x+5)^2 = (7x+5)(7x+5) = 49x^2 + 35x + 35x + 25 = 49x^2 + 70x + 25$

8) $(3x+4)^2 = (3x+4)(3x+4) = 9x^2 + 12x + 12x + 16 = 9x^2 + 24x + 16$

REVIEW 9.1-9.2

Name each polynomial by degree (FIRSTNAME) and number of terms (LASTNAME).

9) $-x - 1$ **LINEAR BINOMIAL**

10) $-4v^2 - 2v - 2$ **QUADRATIC TRINOMIAL**

Simplify each polynomial. Write polynomials in standard form **H → L EXPONENTS w/ CONSTANT LAST**

11) $(-x^3 + 8x - 4x^2 - 6) + (7x^3 + 4x^2 - 6x + 1)$

$6x^2 + 2x - 5$

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

Rewrite as an add problem

$x^4 - 4 + 6x^3 - x^3 - 7x^4 - 3x^2 = -6x^4 + 5x^3 - 3x^2 - 4$

Find each product.

13) $-3x^2(-3x^2 + 7x - 4) = 9x^4 - 21x^3 + 12x^2$

14) $(2x-4)(6x-8) = 12x^2 - 16x - 24x + 32$

$12x^2 - 40x + 32$

15) $(8x-3)(2x^2+5x-3) = 16x^3 + 40x^2 - 24x - 6x^2 - 15x + 9 = 16x^3 + 34x^2 - 39x + 9$

$16x^3 + 34x^2 - 39x + 9$

9.3 Practice A

Date _____ Period _____

Multiply binomials.

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

$25n^2 - 25$

2) $(6n + 3)(6n - 3)$

$36n^2 - 9$

3) $(5x - 8)^2$

$25x^2 - 80x + 64$

4) $(2x - 6)^2$

$4x^2 - 24x + 36$

5) $(2n - 7)(2n + 7)$

$4n^2 - 49$

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

$16n^2 - 9$

7) $(7x + 5)^2$

$49x^2 + 70x + 25$

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

$9x^2 + 24x + 16$

REVIEW 9.1-9.2**Name each polynomial by degree (FIRSTNAME) and number of terms (LASTNAME).**

9) $-x - 1$

linear binomial

10) $-4v^2 - 2v - 2$

quadratic trinomial

Simplify each polynomial. Write polynomials in standard form

11) $(-x^3 + 8x - 4x^2 - 6) + (7x^3 + 4x^2 - 6x + 1)$

$6x^3 + 2x - 5$

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

$-6x^4 + 5x^3 - 3x^2 - 4$

Find each product.

13) $-3x^2(-3x^2 + 7x - 4)$

$9x^4 - 21x^3 + 12x^2$

14) $(2x - 4)(6x - 8)$

$12x^2 - 40x + 32$

15) $(8x - 3)(2x^2 + 5x - 3)$

$16x^3 + 34x^2 - 39x + 9$