



Math II

Name \_\_\_\_\_ ID: 1

### Multiplying Polynomials

Date \_\_\_\_\_ Period \_\_\_\_\_

Find each product. State your solution in STANDARD FORM.

1)  $(5m + 3)(m + 3)$

$5m^2 + 15m + 3m + 9$

$5m^2 + 18m + 9$

2)  $(4n - 1)(3n + 3)$

$12n^2 + 12n - 3n - 3$

$12n^2 + 9n - 3$

3)  $(2n - 3)(4n - 3)$

$8n^2 - 6n - 12n + 9$

$8n^2 - 18n + 9$

4)  $(3x + 2)(5x + 3)$

$15x^2 + 9x + 10x + 6$

$15x^2 + 19x + 6$

5)  $(3m - 5)(m + 5)$

$3m^2 + 15m - 5m - 25$

$3m^2 + 10m - 25$

6)  $(2x - 4)(5x + 5)$

$10x^2 + 10x - 20x - 20$

$10x^2 - 10x - 20$

7)  $(3x - 5)(2x + 1)$

$6x^2 + 3x - 10x - 5$

$6x^2 - 7x - 5$

8)  $(3x - 4)(x + 5)$

$3x^2 + 15x - 4x - 20$

$3x^2 + 11x - 20$



9)  $(2x + 4)(2x + 3)$   
 $4x^2 + 6x + 8x + 12$

$4x^2 + 14x + 12$

11)  $(2n + 2)(2n^2 + 5n - 1)$   
 $4n^3 + 10n^2 - 2n + 4n^2 + 10n - 2$

$4n^3 + 14n^2 + 8n - 2$

13)  $(5x - 5)(x^2 - 3x + 1)$   
 $5x^3 - 15x^2 + 5x - 5x^2 + 15x - 5$

$5x^3 - 20x^2 + 20x - 5$

15)  $(3x - 2)(4x^2 - 2x + 3)$   
 $12x^3 - 6x^2 + 9x - 8x^2 + 4x - 6$

$12x^3 - 14x^2 + 13x - 6$

10)  $(4n - 2)(3n - 1)$   
 $12n^2 - 4n - 6n + 2$

$12n^2 - 10n + 2$

12)  $(5n + 2)(4n^2 - n + 4)$   
 $20n^3 - 5n^2 + 20n + 8n^2 - 2n + 8$

$20n^3 + 3n^2 + 18n + 8$

14)  $(2x - 1)(5x^2 - x - 5)$   
 $10x^3 - 2x^2 - 10x - 5x^2 + x + 5$

$10x^3 - 7x^2 - 9x + 5$

16)  $(2x - 4)(5x^2 - 3x - 2)$   
 $10x^3 - 6x^2 - 4x - 20x^2 + 12x + 8$

$10x^3 - 26x^2 + 8x + 8$

