Name: _____ Date: _____

Fresh Math

Polynomial Mult Div - Medium

Multiply. Write each answer in standard form.

1. $(5x + 5)(-x + 2)$
2. $(x + 5)(-2x^2 - 6x + 9)$
3. $(-x - 8)(5x - 8)$
4. $(x - 5)(3x + 9)$
5. $(-3x + 6)(-5x - 5)$
6. $(3x + 7)(x^2 - 5x + 4)$
7. $(4x + 5)(-x^2 + 6x + 9)$
8. $(-4x - 8)(4x - 3)$
9. $(-2x - 9)(-3x^2 + 6x - 7)$
10. $(-5x + 2)(-x - 3)$

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Polynomial Mult Div - Medium

Multiply. Write each answer in standard form.

11. $(3x + 8)(-3x - 7)$

12. $(-3x + 4)(-x - 4)$

13. $(-2x + 6)(2x + 5)$

14. $(4x + 3)(2x^2 + 2x - 7)$

15. $(-x - 2)(-4x - 7)$

16. $(2x + 7)(x^2 + 3x - 2)$

17. $(5x + 2)(-3x^2 + 6x + 8)$

18. $(4x - 8)(-3x + 3)$

19. $(2x + 1)(3x + 3)$

20. $(5x - 6)(-3x^2 - 2)$

Polynomial Mult Div - Medium - Answer Key

1. $(5x + 5)(-x + 2)$
   $-5x^2 + 5x + 10$

2. $(x + 5)(-2x^2 - 6x + 9)$
   $-2x^3 - 16x^2 - 21x + 45$

3. $(-x - 8)(5x - 8)$
   $-5x^2 - 32x + 64$

4. $(x - 5)(3x + 9)$
   $3x^2 - 6x - 45$

5. $(-3x + 6)(-5x - 5)$
   $15x^2 - 15x - 30$

6. $(3x + 7)(x^2 - 5x + 4)$
   $3x^3 - 8x^2 - 23x + 28$

7. $(4x + 5)(-x^2 + 6x + 9)$
   $-4x^3 + 19x^2 + 66x + 45$

8. $(-4x - 8)(4x - 3)$
   $-16x^2 - 20x + 24$

9. $(-2x - 9)(-3x^2 + 6x - 7)$
   $6x^3 + 15x^2 - 40x + 63$

10. $(-5x + 2)(-x - 3)$
    $5x^2 + 13x - 6$

Polynomial Mult Div - Medium - Answer Key

11. $(3x + 8)(-3x - 7)$

$-9x^2 - 45x - 56$

12. $(-3x + 4)(-x - 4)$

$3x^2 + 8x - 16$

13. $(-2x + 6)(2x + 5)$

$-4x^2 + 2x + 30$

14. $(4x + 3)(2x^2 + 2x - 7)$

$8x^3 + 14x^2 - 22x - 21$

15. $(-x - 2)(-4x - 7)$

$4x^2 + 15x + 14$

16. $(2x + 7)(x^2 + 3x - 2)$

$2x^3 + 13x^2 + 17x - 14$

17. $(5x + 2)(-3x^2 + 6x + 8)$

$-15x^3 + 24x^2 + 52x + 16$

18. $(4x - 8)(-3x + 3)$

$-12x^2 + 36x - 24$

19. $(2x + 1)(3x + 3)$

$6x^2 + 9x + 3$

20. $(5x - 6)(-3x^2 - 2)$

$-15x^3 + 18x^2 - 10x + 12$