

First Name: _____

Last Name: _____

L12 - EQ - 5.1 Multiplying Polynomials

Q1: $3x(x - 2)$

$$3x(x-2)$$

$$3x^2 - 6x$$

	x	-2
$3x$	$3x^2$	$-6x$

$$3x^2 - 6x$$

Q2: $2x^2 y^3(-3x y^2 + 5)$

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

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

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

Q3: $(x - 2)(x + 3)$

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

$$x^2 + x - 6$$

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

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

$$x^2 + x - 6$$

Q4: $(2x - 3)(x + 6) - (x - 2)^2$

$$(2x^2 + 12x - 3x - 18) - (x - 2)(x - 2)$$

$$(2x^2 + 9x - 18) - (x^2 - 2x - 2x + 4)$$

$$(2x^2 + 9x - 18) - (x^2 - 4x + 4)$$

$$\underline{2x^2 + 9x - 18} \quad \underline{-x^2 + 4x - 4}$$

$$x^2 + 13x - 22$$

	x	+6
2x	2x ²	+12x
-3	-3x	-18

$$2x^2 + 9x - 18$$

	x	-2
x	x ²	-2x
-2	-2x	+4

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

$$(2x^2 + 9x - 18) - (x^2 - 4x + 4)$$

$$\underline{2x^2 + 9x - 18} \quad \underline{-x^2 + 4x - 4}$$

$$x^2 + 13x - 22$$

Q5: $(2x^2y + 1)(y + 3x^2y^2 + 5)$

$$(2x^2y + 1)(y + 3x^2y^2 + 5)$$

$$\underline{2x^2y^2} + \underline{6x^4y^3} + \underline{10x^2y} + \underline{y} + \underline{3x^2y^2} + \underline{5}$$

$$+ 6x^4y^3 + \underline{5x^2y^2} + 10x^2y + y + 5$$

	y	+3x ² y ²	+5
2x ² y	2x ² y ²	6x ⁴ y ³	10x ² y
+1	y	3x ² y ²	5

$$\underline{2x^2y^2} + \underline{6x^4y^3} + \underline{10x^2y} + \underline{y} + \underline{3x^2y^2} + \underline{5}$$

$$6x^4y^3 + \underline{5x^2y^2} + 10x^2y + y + 5$$

MARKING

- Beginning 0.0 - 2.0
- Progressing 2.5 - 3.5
- Competent 4.0 - 4.5
- Exemplary 5.0