



Multiplying Polynomials - Box Method

Name _____

Score _____

BM:13

Multiply the polynomials using box method.

1) $(3x + 8)(x^3 - 5x^2 - 6x + 9) =$ _____

	x^3	$-5x^2$	$-6x$	9
3x				
8				

2) $(m^2 - 2m)(3m^3 + 2m^2 + m - 1) =$ _____

	$3m^3$	$2m^2$	m	-1
m^2				
-2m				

3) $(b - 6)(5b^4 - b^3 - 3b^2 + b) =$ _____

	$5b^4$	$-b^3$	$-3b^2$	b
b				
-6				



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Answer key

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Multiply the polynomials using box method.

1) $(3x + 8)(x^3 - 5x^2 - 6x + 9) =$ $3x^4 - 23x^3 - 58x^2 - 11x + 72$

	x^3	$-5x^2$	$-6x$	9
3x	$3x^4$	$-15x^3$	$-18x^2$	$27x$
8	$-8x^3$	$-40x^2$	$-48x$	72

2) $(m^2 - 2m)(3m^3 + 2m^2 + m - 1) =$ $3m^5 - 4m^4 - 3m^3 - 3m^2 + 2m$

	$3m^3$	$2m^2$	m	-1
m^2	$3m^5$	$2m^4$	m^3	$-m^2$
-2m	$-6m^4$	$-4m^3$	$-2m^2$	$2m$

3) $(b - 6)(5b^4 - b^3 - 3b^2 + b) =$ $5b^5 - 31b^4 + 3b^3 + 19b^2 - 6b$

	$5b^4$	$-b^3$	$-3b^2$	b
b	$5b^5$	$-b^4$	$-3b^3$	b^2
-6	$-30b^4$	$6b^3$	$18b^2$	$-6b$