Polynomials and Exponents

Math

Name_____ Class_____ Date_____

1 What is $3x^8 \cdot 9x^0$?

A $27x^9$
B $27x^8$
C $12x^9$
D $12x^8$

2 **Multiply** the monomial by the trinomial:

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

A $5x^3 + 15x - 10$
B $5x^2 + 15x - 10$
C $5x^3 + 15x^2 - 10x$
D $5x^3 + 3x^2 - 10x$

3 **Multiply** the monomial by the polynomial:

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

4 Multiply using the **FOIL** method:

$(2x + 6)(4x + 1)$

A $6x^2 + 24x + 6$

5

7

C 5.49×10^{-5}
D 5.49×10^{-4}

A true
B false

9 What is $(2.5 \times 10^3)(0.3 \times 10^7)$ in correct **scientific notation**?

A $.75 \times 10^{10}$
B 7.5×10^{11}
C 7.5×10^9
D 7.5×10^{10}

10 What is $(3.6 \times 10^{-2})(1.2 \times 10^5)$ in correct **scientific notation**?

A 4.32×10^{-10}
B 4.32×10^3
C 4.32×10^7
D 4.32×10^{10}

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