

Two ways to multiply...

Traditional way (Distribute)

$$\begin{array}{r} 958 \\ \times 46 \\ \hline \end{array} \quad \text{Or} \quad (900+50+8) \cdot (40+6)$$

New way (AREA model) BOX

	900	50	8
40			
6			

Trying it with variables...

$$x(25) \qquad x(2x^2) \qquad x(x^2+4)$$

Multiplying monomials by polynomials

*To multiply a monomial by a polynomial, multiply the monomial by each term in the polynomial using the procedure for multiplication of exponents. **Think distributive property!***

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

Multiplying Polynomials

To find the product of two polynomials, multiply each term in the first factor by each term in the other factor. Then combine like terms.

$$(2x - 3)(x^2 - 2x + 1)$$

