

# **Algebra I**

4-5

## Multiplying Polynomials by Monomials

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### Contrast

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#### When Multiplying:

- 1) Like terms needed?
- 2) Coefficients:
- 3) Exponents:
- 4) Bases:

Example

$$(4x^2y)(7xy^2) =$$

#### When Adding:

- 1) Like terms needed?
- 2) Coefficients:
- 3) Exponents:
- 4) Bases:

Example

$$(4x^2y) + (7xy^2) =$$

When is the only time we add powers?

When is the only time we multiply powers?

Multiply. (pg 159)

$$\begin{array}{r} 5) \quad 3y(y + 5) \\ 9) \quad 3y^2 - y - 5 \\ \hline 2y \end{array}$$

$$17) \frac{1}{3}x^2(6x^2 - 9xy - 3y^2)$$

$$21) 6r^2(2r - 1) - 3(4r^2 - 5r)$$

Solve.

$$29) 15 = 3(x - 1) + 2(4 - x)$$

Assignment:  
Pg. 159  
2-38 even.