

§13-5 Multiplying Monomials by Polynomials

- Use the distributive property!

$$5(3x^2 - 9x + 12)$$

$$5 \cdot 3x^2 - 5 \cdot 9x + 5 \cdot 12$$

$$15x^2 - 45x + 60$$

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$$6a^2(4a - 8a^2 + 3a^3)$$

$$6a^2 \cdot 4a - 6a^2 \cdot 8a^2 + 6a^2 \cdot 3a^3$$

$$6 \cdot 4 \cdot a^2 \cdot a - 6 \cdot 8 \cdot a^2 \cdot a^2 + 6 \cdot 3 \cdot a^2 \cdot a^3$$

$$24a^3 - 48a^4 + 18a^5$$

$$18a^5 - 48a^4 + 24a^3$$

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$$16n^3m^2(4mn + 2m^2n - 3mn^3)$$

$$16n^3m^2 \cdot 4mn + 16n^3m^2 \cdot 2m^2n - 16n^3m^2 \cdot 3mn^3$$

$$64n^4m^3 + 32n^5m^4 - 48n^6m^3$$

$$32m^4n^4 - 48m^3n^6 + 64m^3n^4$$
