

7.1B Factoring Polynomials Using GCF

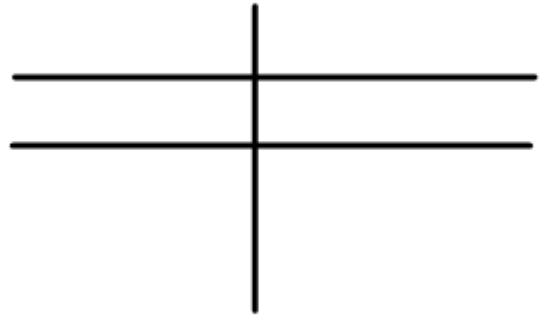
	BEFORE		NOW
Begin	$2x(6x - 9x + 3)$	Begin	$12x^3 - 18x^2 + 6x$
End	$12x^3 - 18x^2 + 6x$	End	$2x(6x - 9x + 3)$

→ **Factoring** a polynomial **completely** means we will be 'undoing' distributive property.

Step to Factoring GCF:

- 1) Examine each term and determine the GCF.
 - a) find the number GCF
 - b) find the variable GCF
- 2) "Pull out" the GCF and place it in front of the "(".
- 3) Divide each term of the polynomial by the GCF and put what's left inside the parentheses()
** you must remember the rules for dividing variables with exponents!*

ex) Factor $3x^2 - 6x$



Practice:

$$2x - 4x^3$$

$$15x^2y^3 + 10xy^2$$

$$15x^3y^3z^3 - 5xyz$$

$$2ay - 4aw - 12a$$

$$48x^5y^3z^4 + 28x^3y^6z$$

$$rs^2 - 2r$$

class review

$$2x - 4x^3$$

$$xc - xd$$

$$\pi r^2 + 2\pi rh$$

$$21r^3s^2 - 14r^2s + 7rs$$