8-2 Factoring Polynomials... REVIEW!!

Objectives:

8-2a: I can completely factor binomial and trinomial expressions.

Factor out the GCF

$$4a^2b^2 - 10ab^3 + 18a^3b^4$$

$$2ab^2(2a - 5b + 9a^2b^2)$$

You Try

Factor out the GCF

$$6y^3 - 14y^2 + 10y$$

Check by multiplying the GCF back into the expression.

Factor out the GCF

$$4x^3 + 6x^2 + 2x$$

Factor out the Greatest Common Binomial Factor

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

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

You Try

Factor out the Greatest Common Binomial Factor

$$4a(a-3)+3(a-3)$$

$9m^3 - 6m^2 - 6m + 4$

$3m^2(3m-2) - 2(3m-2)$

$(3m-2)(3m^2-2)$

$$3x^3 - 18x^2 + 5x - 30$$

Completely factor the quadratic expression.

How is this different?

$4n^2 + 9n + 2$

8
8 1

$4n^2 + 8n + 1n + 2$

$4n(n+2) + 1(n+2)$

$(n+2)(4n+1)$

$6n^2 + 11n + 4$

Completely factor the quadratic expression.

$$x^3 + 6x^2 + 9x$$

$x(x^2 + 6x + 9)$

$x(x+3)(x+3)$

Hmmm...now what?

$x^2 - 4$

$4x^2 - 9$

$x^2 + 0x - 4$

$(x+2)(x-2)$

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