Ch.7+ Test... Tuesday, 27 November: Polynomials

Distributive Property (monomial, binomial and trinomial multiplication)...like the assignment done yesterday.

Addition and Subtraction of Polynomials: collecting and combining LIKE terms, more clarification on subtraction. (This has been the last step in all of the multiplication questions you've done so far.)

***Factoring/Division: Finding and using GCF of polynomials. Several ways of doing this... algebra tiles if time permits... Stay tuned for details.

Term Test... Thursday, 29 November:
everything assessed up to November 28th

Nov 21-3:14 PM

Recap from last week:

1. $3(2x - 4)$

$= 3(2x) + 3(-4)$
$= 6x - 12$

2. $-4x(5x + 7)$

$= -4x(5x) - 4x(7)$
$= -20x^2 - 28x$

3. $(2b + 5)(-3b + 6)$

$= 2b(-3b)+2b(6)+5(-3b)+5(6)$
$= -6b^2 + 12b - 15b + 30$
$= -6b^2 - 3b + 30$

4. $(3y + 4) - (2y + 1)$

$= 3y - 2y + 4 - 1$
$= y + 3$

5. $(-24x + 3a - 44xy^2) - (17a + 8x - 24xy^2)$

$= -24x - 8x + 3a - 17a - 44xy^2 + 24xy^2$
$= -32x - 14a - 20xy^2$

6. $(-18ab + 42c - 7x^2) - (-2ab + 4x^2 - 12c)$

$= -18ab + 2ab + 42c + 12c - 7x^2 - 4x^2$
$= -16ab + 54c - 11x^2$

Factoring:

Finding a pair of values which can be multiplied together to give the value you already have; expressing a value as the product of its factors. Use integers only.

$24 = 1(24) = 2(12) = 3(8) = 4(6) = 6(4) = 8(3) = 12(2) = 24(1)$

$10x = 10(x) = 5(2x) = 2(5x) = 1(10x) = x(10) = 2x(5) = 5x(2)$

$20x + 10 = 2(10x + 5)$
$= 5(4x + 2)$
$= 10(2x+1)$

Since 10 is the GCF of 20x and 10, this is *fully factored.*

Fully factor the following:

1. $4x + 12$
$= 4(x + 3)$

2. $18y + 27$
$= 9(2y + 3)$

3. $40x^2 + 16x + 28$
$= 4(10x^2 + 4x + 7)$

4. $18x^4 - 12x^3 + 24x^2 - 40x$
$= 2x(9x^3 - 6x^2 + 12x - 20)$

since all terms have at least one x in their literal coefficient, the GCF must include an x

To verify (check your work) reapply the distributive property; you should get the expression you started with.

Nov 21-1:45 PM