Polynomials

Monomial __1__ term

Binomial __2__ terms

Trinomial __3__ terms

How are terms separated?????

Terms are separated by “+” and “-“ signs.

How many terms?

$4x-5y+q$ 3

$5(x-3y)$ 2

$5x-15y$

$\frac{3x-4}{5}$ 2

$\frac{3x}{5}-\frac{4}{5}$

Bonus: How many terms? ⇒ 2

$$3x+4y-5x-2y+x$$

$3x-5x+1x+4y-2y$

$-1x+2y$

or $2y-1x$

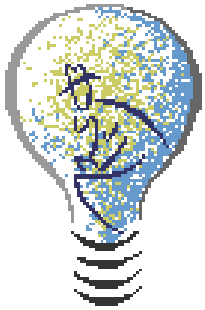
Simplify:

$$2x - 7 + 3x^2 - 5x - 2 - 2x^2$$

$3x^2 - 2x^2 + 2x - 5x - 7 - 2$

$1x^2 - 3x - 9$

$1x^2 - 3x - 9$



Simplify

$4mn(2m - 2n - 1)$

$8m^2n - 8mn^2 - 4mn$

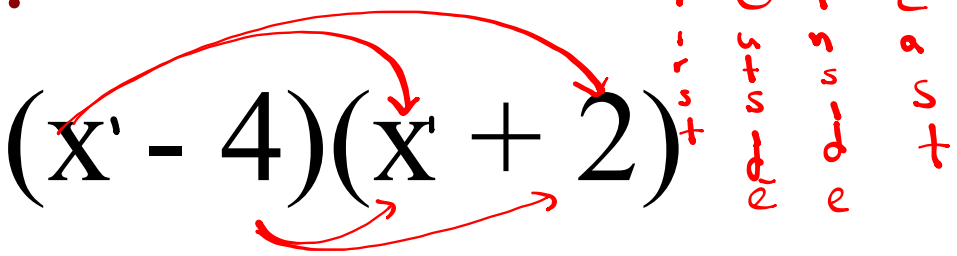
Simplify:

$$5x^2y^3(2x^3y^2z + 3x^1y^1 - 1)$$

$$10x^5y^5z + 15x^3y^4 - 5x^2y^3$$

Simplify:

$$(x' - 4)(x' + 2)$$



$x^2 + 2x - 4x - 8$

$x^2 - 2x - 8$

$(y' - 3)(y' + 6)$

$y^2 + 6y - 3y - 18$

$y^2 + 3y - 18$

$$(w - 5)(w + 7)$$

$w^2 + 7w - 5w - 35$

$w^2 + 2w - 35$


Time for you
to try some
on your own.

$$3n^4(5m^3n^1 - 10m^2n^2)$$

$15m^3n^5 - 30m^2n^6$

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

$x^2 - 3x + 4x - 12$

$x^2 + 1x - 12$

$$4x^1(2x^1 + 1) - 2x^1(3x^1 - 3)$$

$8x^2 + 4x - 6x^2 + 6x$

$2x^2 + 10x$

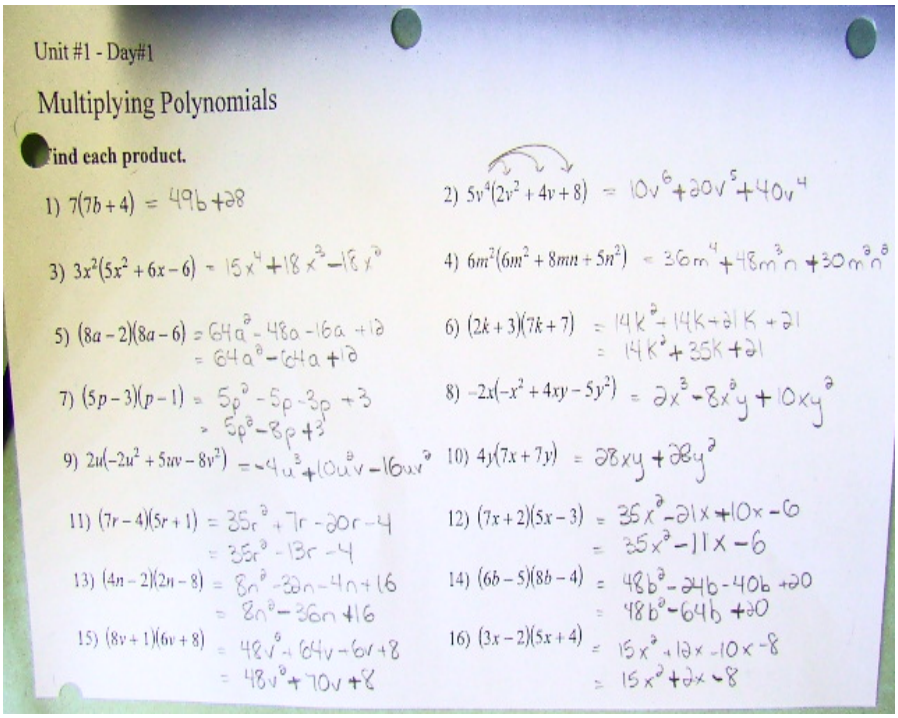
$2x^2 + 10x$

Ultimate Question

$(2x^1 - 2)(3x^2 - 4x^1 + 1)$

$6x^3 - 8x^2 + 2x - 6x^2 + 8x - 2$

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



Unit #1 - Day#1

Multiplying Polynomials

Find each product.

1) $7(7b+4) = 49b+28$

2) $5v^4(2v^2+4v+8) = 10v^6+20v^5+40v^4$

3) $3x^2(5x^2+6x-6) = 15x^4+18x^3-18x^2$

4) $6m^2(6m^2+8mn+5n^2) = 36m^4+48m^3n+30m^2n^2$

5) $(8a-2)(8a-6) = 64a^2-48a-16a+12$
$= 64a^2-64a+12$

6) $(2k+3)(7k+7) = 14k^2+14k+21k+21$
$= 14k^2+35k+21$

7) $(5p-3)(p-1) = 5p^2-5p-3p+3$
$= 5p^2-8p+3$

8) $-2x(-x^2+4xy-5y^2) = 2x^3-8x^2y+10xy^2$

9) $2u(-2u^2+5uv-8v^2) = -4u^3+10u^2v-16uv^2$

10) $4y(7x+7y) = 28xy+28y^2$

11) $(7r-4)(5r+1) = 35r^2+7r-20r-4$
$= 35r^2-13r-4$

12) $(7x+2)(5x-3) = 35x^2-21x+10x-6$
$= 35x^2-11x-6$

13) $(4n-2)(2n-8) = 8n^2-32n-4n+16$
$= 8n^2-36n+16$

14) $(6b-5)(8b-4) = 48b^2-24b-40b+20$
$= 48b^2-64b+20$

15) $(8v+1)(6v+8) = 48v^2+64v+6v+8$
$= 48v^2+70v+8$

16) $(3x-2)(5x+4) = 15x^2+12x-10x-8$
$= 15x^2+2x-8$