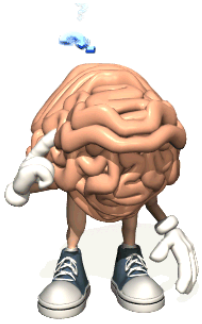


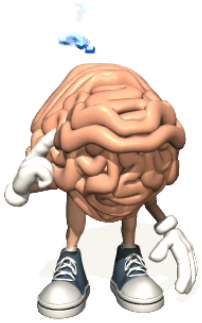
# Warm Up

**Please copy and complete**

**Simplify each of the following:**

**1) $2x^3 - 5x + 7 + 6x^3 + x + 1$**

**2) $-7n^3y - 5n^2y^3 + 2ny^2 - n^2y^3 - n^3y - 12ny^2$**



# Warm Up

**Please copy and complete**

**Simplify each of the following:**

1) $2x^3 - 5x + 7 + 6x^3 + x + 1$

$2x^3 + 6x^3 \quad -5x + x \quad +7 + 1$

$8x^3 \quad - 4x \quad +8$

2) $-7n^3y - 5n^2y^3 + 2ny^2 - n^2y^3 - n^3y - 12ny^2$

$-7n^3y \; -1n^3y \; - 5n^2y^3 - n^2y^3 + 2ny^2 - 12ny^2$

$-8n^3y \quad - 6n^2y^3 - 10ny^2$

# Polynomials

# Extended

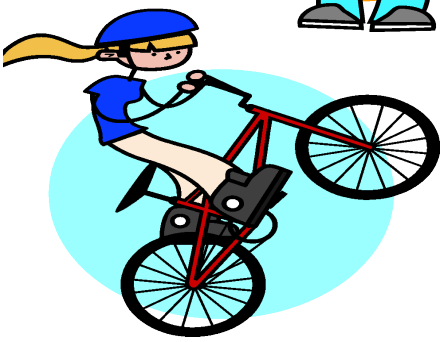
Distributing Factors

Multiplying Polynomials

# Expand & Simplify

Rainbow

Monomial 1 term



Binomial 2 terms

Trinomial 3 terms

*How are terms separated?????*

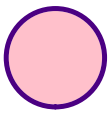
**Terms are separated by "+" and "-" signs.**

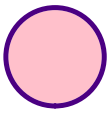
How many terms?

$4x-5y+q$ 3

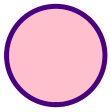
$5(x-3y)$ 2

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





$5x-15y$



Bonus: How many terms?

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

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

$-x + 2y$

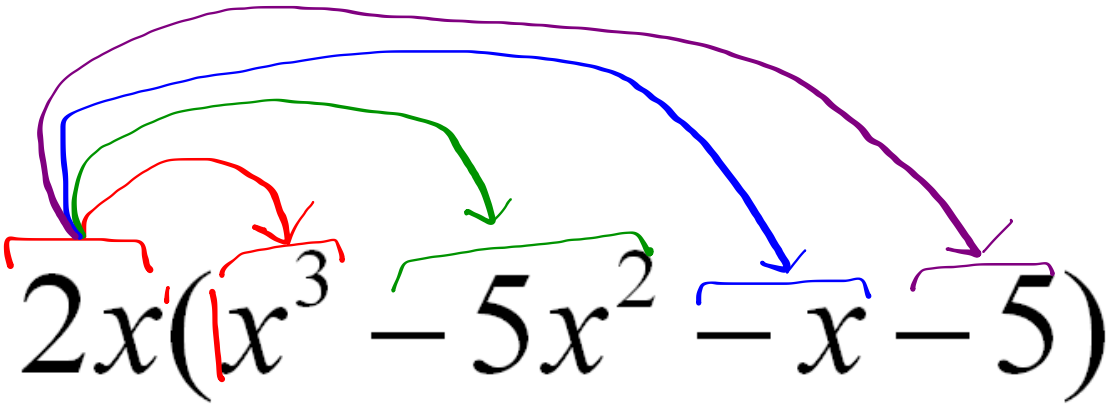
# Expand and collect like terms.

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

$4x - 8 \quad -2x - 6$

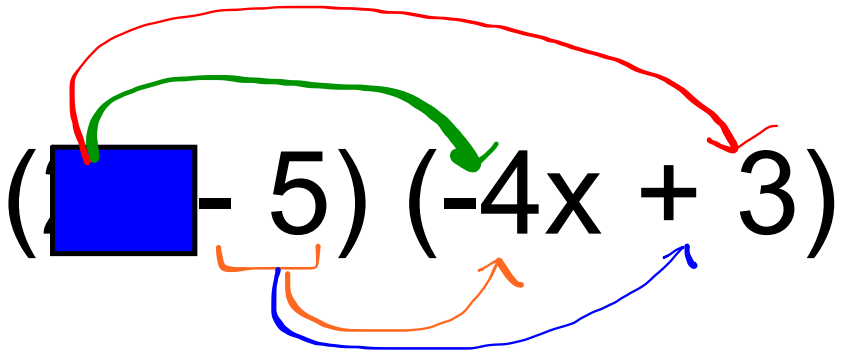
$4x - 2x \quad -8 - 6$

$2x - 14$



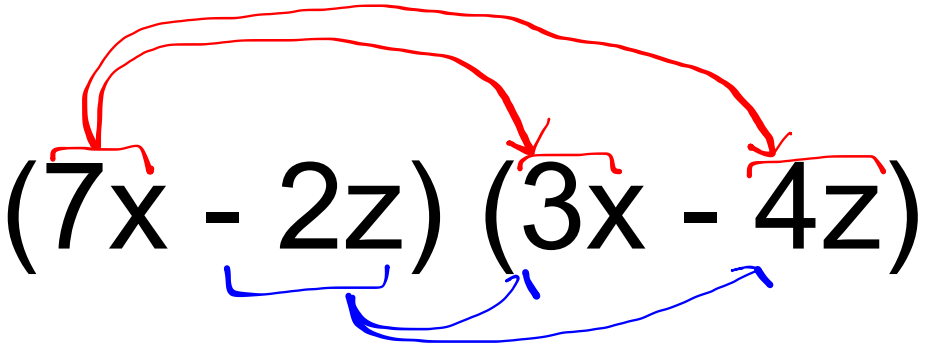

$2x^4 - 10x^3 - 2x^2 - 10x$

$$4(3xy+7x-5)-3(2x+5xy-1)$$




$-8x^2 + 6x + 20x - 15$

$-8x^2 + 26x - 15$




$21x^2 - 28xz - 6xz + 8z^2$

$21x^2 - 34xz + 8z^2$

**15.** Expand and simplify.

a) $(3s + 5)(2s + 2) + (3s + 7)(s + 6)$

b) $(2x + 3)(5x + 4) + (x - 4)(3x - 7)$

$(13x^2 + 4x + 40)$

3.7 Multiplying Polynomials

a) $(3s+5)(2s+2)+(3s+7)(s+6)$

$6s^2+6s+10s+10 \quad + \quad 3s^2+18s+7s+42$

$(6s^2+16s+10) + (3s^2+25s+42)$

$6s^2+3s^2+16s+25s+10+42$

$9s^2+41s+52$