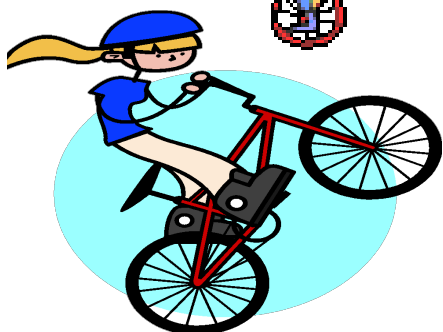






Monomial one term



Binomial two terms



Trinomial three terms

*How are terms separated?????*



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





How many terms?

$$\underline{4x} - \underline{5y} + \underline{q} \quad 3$$

$$5(x - 3y) \quad 2$$

$$= \underline{5} - \underline{15y}$$

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

$$= \left( \frac{3x}{5} \right) - \left( \frac{4}{5} \right)$$

**Bonus:** *Combine "like terms"*  
How many terms?

$$\underline{3x} + \underline{4y} - \underline{5x} - \underline{2y} + \underline{x}$$

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

$$= -1x + 2y$$

$$\checkmark = -x + 2y$$

$$\checkmark = 2y - x$$

} 2 terms



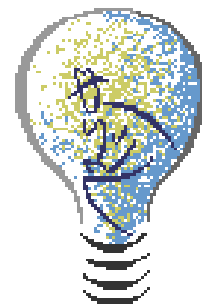
Simplify:

$$\underline{2x} - \underline{7} + \underline{3x^2} - \underline{5x} - \underline{2} - \underline{2x^2}$$

$$= -3x - 9 + 1x^2$$

$$= 1x^2 - 3x - 9$$

$$= x^2 - 3x - 9 \quad (3 \text{ terms})$$



**Simplify**

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

$$8m^{1+1}n - 8mn^{1+1} - 4mn$$

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



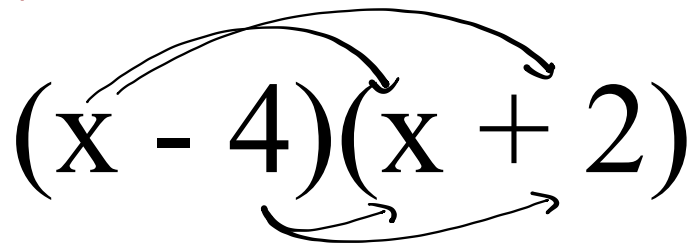
**Simplify:**

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

$$10x^{2+3}y^{3+2}z + 15x^{2+1}y^{3+1} - 5x^2y^3$$

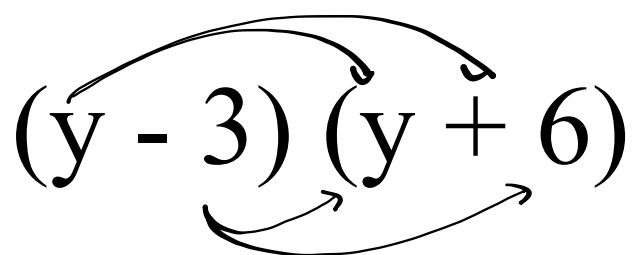
$$10x^5y^5z + 15x^3y^4 - 5x^2y^3$$

**Simplify:**

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


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

$$x^2 - 2x - 8$$

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


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

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

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

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

$$w^2 + 2w - 35$$



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

$$= 15m^3n^{4+1} - 30m^2n^{4+2}$$

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

multiplying binomials

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

F → First  
O → Outside  
I → Inside  
L → Last

$$= x^2 - \underline{3x} + \underline{4x} - 12$$
$$= x^2 + 1x - 12$$
$$= x^2 + x - 12$$

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

$$= \underline{8x^2} + \underline{4x} - \underline{6x^2} + \underline{6x}$$

$$= \underline{2x^2} + \underline{10x}$$



## Ultimate Question

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

$$= \underline{6x^3} - \underline{8x^2} + \underline{2x} - \underline{6x^2} + \underline{8x} - \underline{2}$$

$$= 6x^3 - \underline{14x^2} + \underline{10x} - 2$$

