Math 2

Toolkits
&
gluesticks.

+/− Combining Like Terms

LIKE TERMS:
- Same Variable
- Same exponent
- Order doesn't matter

$-2x + 3 - 4x + 5 - 4x^2 + 11 - 15x + 2x^2 - 15$

$-21x + 4 - 2x^2$

$\boxed{-2x^2 - 21x + 4}$

$x + 2x - 9 + xy - 2 - 3x + 2xy - 4 - 3yx$

$0x - 15 + 0xy$

$\boxed{-15}$

$4x + yz - 3 + 2x + 4xyz - 1x + 8 + 2zy - 9$

$\boxed{5x + 3yz - 4 + 4xyz}$

Distributive Property

$$A(B + C) = AB + AC$$

$$A(B - C) = AB - AC$$

$$A + (B + C) = A + B + C$$

$$A - 1(B + C) = A - B - C$$

$$A + 1(B - C) = A + B - C$$

$$A - 1(B - C) = A - B + C$$

Expression	What number(s) should be distributed?	Distribute	Combine Like Terms	Final Answer
$-2(x-3)$	-2	$-2(x) -2(-3)$	$-2x +6$	$-2x+6$
$5(x-4)+2x-3$	5	$5(x)+5(-4)+2x-3$	$5x-20+2x-3$	$7x-23$
$3+2(x-5)$	2	$3+2(x)+2(-5)$	$3+2x-10$	$2x-7$
$2-(-x+5)$	-1	$2+-1(-x)+-1(5)$	$2+x+5$	$x+7$
$4(x+1)-5$				
$2-(x-9)$	-1	$2+-1(x)+-1(-9)$	$2-x+9$	$-x+11$
$3-2(x+1)+(5x-4)$				
$-(x-x^2)-2(5-x)+7$				
$-3x+4)-2\cdot(5-x)$				
$-(x^2-3x+2)-x(x-4)$				