

Combining Like Terms

★ Like terms have the same variables raised to the same exponents

★ Constants are like terms

★ You add the coefficients of like terms to simplify

Like Terms

$-x^2, -6x^2$ $-5x^2, 3x^2$ $-8x^2, 2x^2$	$x, 4x$ $-7x, \frac{1}{2}x$	$3y, 7y$ $-2y, \frac{3}{4}y$	$5, 1, 96$ $12, -3$
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Example 1: $3x + 9 + 2x - 5$

distributive prop \rightarrow $3x + 2x + 9 - 5$ commutative prop \leftarrow

$(3+2)x + 4$

$5x + 4$

Example 2: $1y + 1y + 1y + 2x$

distributive property \rightarrow $(1+1+1)y + 2x$

$3y + 2x$

Example 3: $7x + 2(x - 5y)$

distributive prop \rightarrow $7x + 2x - 10y$ distributive prop \leftarrow

$(7+2)x - 10y$

$9x - 10y$