

1.06 Combining Like Terms

The Distributive Property

Basic Algebra: One Step at a Time. Page 31 - 38: #56, 57, 59, 60.

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p. 32-38:

56. $2x(6x - 5) + 6(5 - 8x)$

$12x^2 - 10x + 30 - 48x$ By the Distributive Property

$12x^2 - 10x - 48x + 30$ Rearrange the terms

$12x^2 - 58x + 30$ By combining like terms

57. $4x(x + 3) - 8x(5x - 2)$

$4x^2 + 12x - 40x^2 + 16x$ By the Distributive Property

$4x^2 - 40x^2 + 12x + 16x$ Rearrange the terms

$-36x^2 + 28x$ By combining like terms

59. $9(4x - 5y) - 6(2y - 3x) - 3(6x - 7y)$

$36x - 45y - 12y + 18x - 18x + 21y$ By the Distributive Property

$36x + 18x - 18x - 45y - 12y + 21y$ Rearrange the terms

$36x + \cancel{18x} - \cancel{18x} - 45y - 12y + 21y$

$36x - 57y + 21y$ By combining like terms

$36x - 36y$ By combining like terms

60. $6x(4x - 5) - 5y(2y + 3) - 4(3x + 8y)$

$24x^2 - 30x - 10y^2 - 15y - 12x - 32y$ By the Distributive Property

$24x^2 - 30x - 12x - 10y^2 - 15y - 32y$ Rearrange the terms

$24x^2 - 42x - 10y^2 - 47y$ By combining like terms