Factoring allows us to solve complex equations like quadratic equations.

Factoring is the opposite of distributing.

factor

Factored form $2(x-5) = 2x-10$ Expanded form

distribute

The simplest method is factoring a common factor.

$3x+12$

3	$3x$	12
	x	4

$=3(x+4)$ factored

check $3x+12$

$5x^2-30x$

$5x$	$5x^2$	$-30x$
	x	-6

$=5x(x-6)$

$6x-15$

$=3(2x-5)$

$-x-5$

$=-(x+5)$