

## Brackets

Multiply Out:

1

$6(x-2)$	$6x - 12$
$3(x+5)$	$3x + 15$
$4(3x+4)$	$12x + 16$
$5(4-3x)$	$20 - 15x$
$6(x^2-2x)$	$6x^2 - 12x$

2

$6(x+2) + 3(x+1)$	$6x + 12 + 3x + 3 = 9x + 15$
$2(x+5) + 4(x-3)$	$2x + 10 + 4x - 12 = 6x - 2$
$5(3x+4) + 3(x-2)$	$15x + 20 + 3x - 6 = 18x + 14$
$4(4-3x) + (x-4)$	$16 - 12x + x - 4 = 12 - 11x$
$6(x^2-2x) + 3(x+1)$	$6x^2 - 12x + 3x + 3 = 6x^2 - 9x + 3$

3

$3(2x+5) - 3(x+1)$	$6x + 15 - 3x - 3 = 3x + 12$
$2(5x+4) - 4(2x-3)$	$10x + 8 - 8x + 12 = 2x + 20$
$5(3x-4) - 3(x-2)$	$15x - 20 - 3x + 6 = 12x - 14$
$7(5-3x) - 2(x-4)$	$35 - 21x - 2x + 8 = -23x + 43$
$6x(2x-1) + 3x(x+1)$	$12x^2 - 6x + 3x^2 + 3x = 15x^2 - 3x$

FOIL

4

$(x+5)(x+1)$	$x^2 + x + 5x + 5 = x^2 + 6x + 5$
$(x+3)(x+2)$	$x^2 + 2x + 3x + 6 = x^2 + 5x + 6$
$(x+4)(x-3)$	$x^2 - 3x + 4x - 12 = x^2 + x - 12$
$(x-2)(x+1)$	$x^2 + x - 2x - 2 = x^2 - x - 2$
$(x-5)(x-3)$	$x^2 - 3x - 5x + 15 = x^2 - 8x + 15$

FOIL

5

$(2x+5)(x+1)$	$2x^2 + 2x + 5x + 5 = 2x^2 + 7x + 5$
$(x+3)(3x+2)$	$3x^2 + 2x + 9x + 6 = 3x^2 + 11x + 6$
$(3x+4)(2x-3)$	$6x^2 - 9x + 8x - 12 = 6x^2 - x - 12$
$(5x-2)(3x+1)$	$15x^2 + 5x - 6x - 2 = 15x^2 - x - 2$
$(3x-5)(4x-3)$	$12x^2 - 9x - 20x + 15 = 12x^2 - 29x + 15$