

# DOUBLE

$$(2x-1)(3x+5)$$

	$2x$	$-1$
$3x$	$6x^2$	$-3x$
$5$	$10x$	$-5$

$$= 6x^2 + 7x - 5$$

→ Remember to simplify, check the signs; positive or negative

$$(2x+3)^2$$

$$= (2x+3)(2x+3)$$

$2x$	$3$
$2x$	$4x^2$
$3$	$6x$
$3$	$6x$
	$9$

$$= 4x^2 + 12x + 9$$

# TRIPLE

→ Multiply the first 2 in the grid  
 → Then multiply the answer by the third bracket, remember to simplify

$$(2x-1)(x+5)(3x-4)$$

• First and second bracket

	$2x$	$-1$
$x$	$2x^2$	$-x$
$5$	$10x$	$-5$

$$= 2x^2 + 9x - 5$$

# EXPANDING

Expanding is when brackets are removed by multiplying

	$2x^2$	$9x$	$-5$
$3x$	$6x^3$	$27x^2$	$-15x$
$-4$	$-8x^2$	$-36x$	$+20$

$$= 6x^3 + 19x^2 - 51x + 20$$

# SINGLE

- use the grid
- remember to multiply
- $y \times y = y^2$
- $x \times y = xy$

Examples

$$2y(3y-5) = 6y^2 - 10y$$

	$3y$	$-5$
$2y$	$6y^2$	$-10y$

$$x(x+3) = x^2 + 3x$$

	$x$	$3$
$x$	$x^2$	$3x$

$$5(2x-3) - 2(4x-9)$$

$$= 10x - 15 - 8x + 18$$

$$= 2x + 3$$

→ Remember to simplify