

Completing the Square

	Type of Question	Question
1	Even linear coefficient (easy to halve)	$x^2 + 6x + 5$
2	Odd linear coefficient (harder to halve, use fractions)	$x^2 + 5x + 5$
3	Coefficient of x^2 not 1 (factorise by this first)	$2x^2 + 12x + 5$
4	Coefficient of x^2 not 1 and, once factorised, odd linear coefficient	$2x^2 + 6x + 5$
5	Coefficient of x^2 not 1 and odd linear coefficient	$2x^2 + 5x + 5$

More Practice

Type 1	Type 2	Type 3	Type 4	Type 5
$x^2 - 4x - 21$ $x^2 - 2x - 21$ $x^2 + 22x + 21$	$x^2 + 5x - 21$ $x^2 + 7x - 21$ $x^2 - 7x - 21$	$2x^2 - 4x + 6$ $2x^2 + 12x + 6$ $3x^2 - 6x + 6$ $4x^2 + 8x + 6$	$2x^2 - 6x + 6$ $2x^2 + 10x - 7$ $3x^2 - 9x + 6$ $4x^2 + 4x + 6$	$2x^2 - 5x + 6$ $2x^2 + 11x - 7$ $3x^2 - x - 6$ $4x^2 + 5x - 5$