

# Fill in the Blanks

# Factorising Harder Quadratics ( $ax^2 + bx + c$ )

Quadratic	$a \times c$	$\times$ to give $ac$ + to give $b$	Split the middle term	Group and Factorise	Factorised Quadratic
$2x^2 + 7x + 6$	12	+4, +3	$2x^2 + 4x + 3x + 6$	$2x(x + 2) + 3(x + 2)$	$(2x + 3)(x + 2)$
$3x^2 + 19x + 6$	18	+18, +1	$3x^2 + 18x + x + 6$	$3x(x + 6) + 1(x + 6)$	
$8x^2 + 6x - 9$	-72	+12, -6			
$5x^2 + 12x - 9$					
$9x^2 - 9x - 10$					
$6x^2 + x - 5$					
$8x^2 - 18x + 7$				$2x(4x - 7) - 1(4x - 7)$	
$4x^2 - 12x + 5$					
		+15, +2	$6x^2 + 15x + 2x + 5$		
				$4x(3x - 2) + 5(3x - 2)$	
					$(5x - 4)(2x + 1)$