

Factorising Quadratics $a > 1$ Mark Scheme		
1(a)	$2x^2 + 14x + 24 = (2x + 6)(x + 4)$	[1] – 1 correct bracket
	$(2x + 6)(x + 4)$	[1] – Final answer
1(b)	$3x^2 + 13x + 14 = (3x + 7)(x + 2)$	[1] – 1 correct bracket
	$(3x + 7)(x + 2)$	[1] – Final answer
1(c)	$3x^2 + 30x + 48 = (x + 8)(3x + 6)$	[1] – 1 correct bracket
	$(x + 8)(3x + 6)$	[1] – Final answer accept $(x + 2)(3x + 24)$
1(d)	$5x^2 + 39x + 28 = (x + 7)(5x + 4)$	[1] – 1 correct bracket
	$(x + 7)(5x + 4)$	[1] – Final answer
1(e)	$5x^2 + 27x + 10 = (x + 5)(5x + 2)$	[1] – 1 correct bracket
	$(x + 5)(5x + 2)$	[1] – Final answer
2(a)	$4x^2 + 20x + 16 = (2x + 2)(2x + 8)$	[1] – 1 correct bracket
	$(2x + 2)(2x + 8)$	[1] – Final answer
2(b)	$6x^2 + 32x + 42 = (3x + 7)(2x + 6)$	[1] – 1 correct bracket
	$(3x + 7)(2x + 6)$	[1] – Final answer
2(c)	$4x^2 + 18x + 8 = (x + 4)(4x + 2)$	[1] – 1 correct bracket
	$(x + 4)(4x + 2)$	[1] – Final answer
2(d)	$8x^2 + 46x + 30 = (8x + 6)(x + 5)$	[1] – 1 correct bracket
	$(8x + 6)(x + 5)$	[1] – Final answer
2(e)	$9x^2 + 24x + 16 = (3x + 4)(3x + 4)$	[1] – 1 correct bracket
	$(3x + 4)(3x + 4)$	[1] – Final answer
3(a)	$2x^2 - 18x + 16 = (x - 8)(2x - 2)$	[1] – 1 correct bracket
	$(x - 8)(2x - 2)$	[1] – Final answer accept $(x - 21)(2x - 16)$
3(b)	$7x^2 - 8x + 1 = (x - 1)(7x - 1)$	[1] – 1 correct bracket
	$(x - 1)(7x - 1)$	[1] – Final answer
3(c)	$6x^2 - 22x + 12 = (2x - 6)(3x - 2)$	[1] – 1 correct bracket
	$(2x - 6)(3x - 2)$	[1] – Final answer

Turn over ►

3(d)	$3x^2 - 20x + 12 = (x - 6)(3x - 2)$	[1] – 1 correct bracket
	$(x - 6)(3x - 2)$	[1] – Final answer
3(e)	$8x^2 - 26x + 6 = (x - 3)(8x - 2)$	[1] – 1 correct bracket
	$(x - 3)(8x - 2)$	[1] – Final answer
4(a)	$2x^2 + 2x - 12 = (2x - 4)(x + 3)$	[1] – 1 correct bracket
	$= (2x - 4)(x + 3)$	[1] – Final answer
4(b)	$3x^2 - 20x - 32 = (3x + 4)(x - 8)$	[1] – 1 correct bracket
	$(3x + 4)(x - 8)$	[1] – Final answer
4(c)	$3x^2 + 15x - 42 = (x + 7)(3x - 6)$	[1] – 1 correct bracket
	$(x + 7)(3x - 6)$	[1] – Final answer
4(d)	$5x^2 - 26x - 24 = (x - 6)(5x + 4)$	[1] – 1 correct bracket
	$(x - 6)(5x + 4)$	[1] – Final answer
4(e)	$7x^2 - 23x - 20 = (x - 4)(7x + 5)$	[1] – 1 correct bracket
	$(x - 4)(7x + 5)$	[1] – Final answer
5(a)	$6x^2 - 26x + 24 = (2x - 6)(3x - 4)$	[1] – 1 correct bracket
	$(2x - 6)(3x - 4)$	[1] – Final answer
5(b)	$8x^2 - 56x + 48 = (8x - 8)(x - 6)$	[1] – 1 correct bracket
	$(8x - 8)(x - 6)$	[1] – Final answer
5(c)	$6x^2 + x - 7 = (6x + 7)(x - 1)$	[1] – 1 correct bracket
	$(6x + 7)(x - 1)$	[1] – Final answer
6(a)	$(x + 8)(x - 8)$	[1] – Final answer
6(b)	$(x + y)(x - y)$	[1] – Final answer

END