1		$x^3+6x^2+11x+6$	M1	for method to find the product of any two linear expressions (3 correct terms) e.g. $x^2+x+2x+2$ or $x^2+2x+3x+6$ or $x^2+x+3x+3$	
			M1	for method of multiplying out remaining products, half of which are correct (ft their first product) e.g. $x^3+x^2+2x^2+3x^2+2x+3x+6x+6$	
			A1	cao	

2	$\dfrac{--4 \pm \sqrt{(-4)^2 - 4 \times 1 \times 1}}{2 \times 1}$	0.268, 3.73	M1	for $x - 2 = \pm\sqrt{3}$ oe or one solution or use of $x^2 - 4x + 1 = 0$ to substitute into formula (allow one error in substitution)
			A1	$0.267 - 0.27$, $3.7 - 3.74$

3	(a)	$(a - b)(a + b)$	B1	cao	Accept reversed brackets
	(b)	$12(x^2 + 1)$	M1	for using 'a' $= x^2 + 4$ and 'b' $= x^2 - 2$	
				OR multiplying out both brackets, at least one fully correct	Correct 4 terms if not simplified or 3 terms if simplified
			M1	(dep) for a correct expression for ('a' + 'b')('a' – 'b') with no additional brackets, simplified or unsimplified eg $(x^2 + 4 + x^2 - 2)(x^2 + 4 - x^2 + 2)$ **or** $(2x^2 + 2) \times 6$	
				OR ft for a correct expression without brackets, simplified or unsimplified eg $x^4 + 8x^2 + 16 - x^4 + 4x^2 - 4$	
			A1	for $12(x^2 + 1)$ **or** $12x^2 + 12$ oe	

4	$9p + 13$	M1	for method to expand one bracket, eg $5 \times p + 5 \times 3\ (= 5p + 15)$ or $2 \times 1 - 2 \times 2p\ (= 2 - 4p)$ or $-2 \times 1 - 2 \times -2p\ (=-2 + 4p)$	If an attempt is made to multiply by -2 in the second brackets then it must be done consistently.
		A1	cao	

5	(a)	$x^2 - 4x - 45$	M1	for 3 of 4 terms correct **or** 4 terms correct ignoring signs	3 terms correct can be implied, eg $x^2 - 4x + c$
			A1	cao	
	(b)	$3x(3x + 2)$	B2	for $3x(3x + 2)$	
			(B1	for $3(3x^2 + 2x)$ **or** $x(9x + 6)$ **or** $3x(ax + b)$ where a and b are integers **or** $(3x + 2)$ as a factor)	