16 a	E.g. $x^2 + 4x – 2x – 8$ (= $x^2 + 2x – 8$) **or** $x^2 – 2x + x – 2$ (= $x^2 – x – 2$) **or** $x^2 + 4x + x + 4$ (= $x^2 + 5x + 4$)		3	M1	for multiplying out two brackets correctly with no more than one error
	E.g. $x^3 + 2x^2 – 8x + x^2 + 2x – 8$ or $x^3 + 4x^2 – 2x^2 – 8x + x^2 + 4x – 2x – 8$ **or** $x^3 – x^2 – 2x + 4x^2 – 4x – 8$ or $x^3 – 2x^2 + x^2 – 2x + 4x^2 – 8x + 4x – 8$ **or** $x^3 + 5x^2 + 4x – 2x^2 – 10x – 8$ or $x^3 + 4x^2 + x^2 + 4x – 2x^2 – 8x – 2x – 8$			M1	for at least 3 terms correct out of a maximum of 6 terms **or** for at least 4 terms correct out of a maximum of 8 terms
		$x^3 + 3x^2 – 6x – 8$		A1	
b	E.g. $(x – 5)^2 – 5^2$ (+ 40) or $(x – 5)^2 – 25$ (+ 40) $\left(x^2 + 2ax + a^2\left(+b^2\right)\right)$ $2a = –10$ or $a = –5$		2	M1	for a correct first step **or** for equating coefficients
		$(x – 5)^2 + 15$		A1	accept $a = –5$, $b = 15$ SC B1 for $\left(–x + 5\right)^2 + 15$ or $\left(5 – x\right)^2 + 15$
					Total 5 marks