14 (a)	$(3x + 1)(2 – x) = 6x – 3x^2 + 2 – x$ $(= –3x^2 + 5x + 2)$ **or** $(2 – x)(4 + x) = 8 + 2x – 4x – x^2$ $(= –x^2 – 2x + 8)$ **or** $(3x + 1)(4 + x) = 12x + 3x^2 + 4 + x$ $(= 3x^2 + 13x + 4)$		3	M1	for a correct method to expand two brackets with at least 3 terms correct out of 4 terms (or 2 terms correct out of 3 terms). Do not award this mark for eg $6x – 3x^2 + 2 – x + 8 + 2x – 4x – x^2$ or $6x – 3x^2 + 2 – x + 4 + x$
	$(–3x^2 + 5x + 2)(4 + x) = –12x^2 – 3x^3 + 20x + 5x^2 + 8 + 2x$ **or** $(–x^2 – 2x + 8)(3x + 1) = –3x^3 – x^2 – 6x^2 – 2x + 24x + 8$ **or** $(3x^2 + 13x + 4)(2 – x) = 6x^2 – 3x^3 + 26x – 13x^2 + 8 – 4x$			M1	ft dep on M1 **and** a quadratic for a correct method to multiply by the 3rd bracket – allow one further error
	Correct answer scores full marks (unless from obvious incorrect working)	$–3x^3 – 7x^2 + 22x + 8$		A1	oe but must be simplified eg $22x – 3x^3 – 7x^2 + 8$ if no working shown then award B2 for 3 out of a maximum of 4 terms correct
	ALTERNATIVE				
ALT (a)	$24x + 6x^2 – 12x^2 – 3x^3 + 8 + 2x – 4x – x^2$ oe		3	M2 (M1	for a complete expansion with 8 terms present of which at least 4 are correct for at least 4 correct terms from any number of terms)
		$–3x^3 – 7x^2 + 22x + 8$		A1	oe but must be simplified eg $22x – 3x^3 – 7x^2 + 8$ if no working shown then award B2 for 3 out of a maximum of 4 terms correct

(b)	$\left(\frac{1}{a^6b^4}\right)^{-\frac{1}{2}}$ **or** $\left(a^{-6}b^{-4}\right)^{-\frac{1}{2}}$ **or** $\left(\frac{a^{1.5}b^{0.5}}{a^{4.5}b^{2.5}}\right)^{-1}$ **or** $\left(\frac{a^9b^5}{a^3b}\right)^{\frac{1}{2}}$ **or** $\left(\frac{a^{-3}b^{-1}}{a^{-9}b^{-5}}\right)^{\frac{1}{2}}$ oe		3	M1	for simplifying the a and the b term in the fraction **or** for applying the power ½ to at least 3 out of 4 of a^3, b, a^9, b^5 **or** for applying the negative power to at least 3 out of 4 of a^3, b, a^9, b^5
	$\left(\frac{1}{a^3b^2}\right)^{-1}$ **or** $\left(a^{-3}b^{-2}\right)^{-1}$ **or** $\frac{a^{4.5}b^{2.5}}{a^{1.5}b^{0.5}}$ **or** $\left(a^6b^4\right)^{\frac{1}{2}}$ **or** $\left(\frac{a^{-1.5}b^{-0.5}}{a^{-4.5}b^{-2.5}}\right)$ oe			M1	for two of simplifying the a and the b term in the fraction **or** for applying the power ½ to at least 3 out of 4 of a^3, b, a^9, b^5 **or** for applying the negative power to at least 3 out of 4 of a^3, b, a^9, b^5
	Correct answer scores full marks (unless from obvious incorrect working)	a^3b^2		A1	accept $\frac{1}{a^{-3}b^{-2}}$
					Total 6 marks