

1	(c)	$5x - 3 = 4(2x + 3)$ oe or $\frac{5x}{4} - \frac{3}{4} = 2x + 3$ oe		3	M1 for correctly removing the denominator, condone missing brackets
		e.g. $5x - 8x = 12 + 3$ or $-3x = 12 + 3$ or $8x - 5x = -12 - 3$ or $3x = -12 - 3$ or $-\frac{3}{4} - 3 = 2x - \frac{5x}{4}$ or $-\frac{15}{4} = \frac{3x}{4}$			M1 for a correct rearrangement with terms in x on one side and numbers on the other, allow correct rearrangement of their equation in the form $ax + b = cx + d$
			-5		A1 dep on at least M1 SCB2 for an answer of $x = -2$ coming from $5x - 3 = 8x + 3$ or $x = 5$ coming from $5x - 3 = 2x + 12$

2	(d)	E.g. $6x - 15$ or $12x - 30$ oe		4	M1 for expansion of a correct bracket
		$2 \times 3(2x - 5) = 9 - x$ oe or $2('6x - 15') = 9 - x$ oe or $3(2x - 5) = \frac{9}{2} - \frac{x}{2}$ oe			M1 for removal of fraction or separating fraction (RHS) in an equation
		$12x + x = 9 + 30$ oe or $6x + \frac{x}{2} = \frac{9}{2} + 15$ oe			M1 ft (dep on 4 terms) for terms in x on one side of equation; number terms on the other
			3		A1 dep on at least M2 awarded

3	(b)		4	1	B1
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4	(c)		7	1	B1 cao
	(d)		14	1	B1 cao

5	(c)	$w^2 \times w^n = w^{10}$ or $w^5 \times w^n = w^{13}$ or $w^5 \times w^{n-3} = w^{10}$ or $\frac{w^{5+n}}{w^3} = w^{10}$ oe or $5 + n - 3 = 10$ or $2 + n = 10$ or $5 + n = 13$		2	M1 A correct first stage simplifying at least one index in a correct equation or a correct equation using indices only
		<i>Working not required, so correct answer scores full marks (unless from obvious incorrect working)</i>	8		A1 accept w^8 (trial and error gains full marks if correct and no marks if incorrect unless a rule of indices is clearly shown)

6	(d)	eg $5x - x = 12 + 7$ or $-7 - 12 = x - 5x$ or $4x - 7 = 12$ or $5x = x + 19$ oe		3	M1 for rearrangement with x terms on one side and numerical terms on the other in a correct equation or the correct simplification of x terms or numbers on one side in a correct equation
		$4x = 19$ or $-4x = -19$			M1 x terms simplified and number terms simplified correctly in an equation
		<i>Working required</i>	4.75		A1 oe, eg $\frac{19}{4}$ or $4\frac{3}{4}$ dep on M1

7	(a)		$6p$	1	B1
	(b)		$8y^2$	1	B1
	(c)		e^5	1	B1
	(d)		$20cd$	1	B1
	(e)		26	1	B1
	(f)	$424 = 4n$		2	M1 For 424 or 324 + 225 - 125 with at most one error
			106		A1 SCB1 for 524 or 674
	(g)		$3(3t - 2)$	1	B1
Total 8 marks					

8	(b)	$y^5 \times y^n = y^{19}$ or $y^{-1} \times y^n = y^{13}$ or $5 + n - 6 = 13$		2	M1 Use of 1 rule of indices or a correct equation in n
			14		A1 Accept y^{14}

9	(a)		6	1	B1
	(b)		19	1	B1