Question	Answer	Marks	Guidance
1	$3x \qquad A \qquad Bx + C$	M1	correct form of partial fractions
	$\overline{(2-x)(4+x^2)}^{-}\overline{2-x}^{+}\overline{4+x^2}$		(condone additional coeffs eg $\frac{Ax+B}{2-x} + \frac{Cx+D}{4+x^2}$ * for M1
			BUT $\frac{A}{2-x} + \frac{B}{4+x^2} ** \text{ is M0}$)
	$\Rightarrow 3x = A(4+x^2) + (Bx+C)(2-x)$	M1	Multiplying through oe and substituting values or equating coeffs at LEAST AS FAR AS FINDING A VALUE for one of their unknowns (even if incorrect)
			Can award in cases * and ** above
			Condone a sign error or single computational error for M1 but not a conceptual error
			Eg $3x = A(2-x) + (Bx + C)(4 + x^2)$ is M0
			$3x(2-x)(4+x^2) = A(4+x^2) + (Bx+C)(2-x)$ is M0
			Do not condone missing brackets unless it is clear from subsequent work that they were implied.
			Eg $3x = A(4 + x^2) + Bx + C(2 - x) = 4A + Ax^2 + Bx + 2C - Cx$ is M0
			$= 4A + Ax^2 + 2Bx - Bx^2 + 2C - Cx \text{ is } M1$
	$x = 2 \Longrightarrow 6 = 8A$, $A = \frac{3}{4}$	A1	oe www
			[SC B1 $A = 3/4$ from cover up rule can be applied, then the M1 applies to the other coefficients]
			<u>NB</u> $\frac{A}{2-x} + \frac{B}{4+x^2} \Rightarrow A = 3/4$ is A0 ww (wrong working)
	x^2 coeffs: $0 = A - B \Longrightarrow B = \frac{3}{4}$	A1	oe www
	constants: $0 = 4A + 2C \implies C = -1\frac{1}{2}$	A1	oe www [In the case of * above, all 4 constants are needed for the final A1]
			Ignore subsequent errors when recompiling the final solution provided that the coeffs were all correct
		[5]	

Q	Question		Answer	Marks	Guidance
2			$(4+x)^{\frac{3}{2}} = 4^{\frac{3}{2}}(1+\frac{1}{4}x)^{\frac{3}{2}}$	M1	dealing with the '4' to obtain $4^{3/2}(1+\frac{x}{4})^{3/2}$ (or expanding as $4^{3/2} + \frac{3}{2}4^{1/2}x + \left(\frac{3}{2}\right)\left(\frac{1}{2}\right)4^{-1/2}\frac{x^2}{2!} + \dots$ and having all the powers of 4 correct)
			$= 8(1 + \frac{3}{2}(\frac{1}{4}x) + \frac{3}{2} \cdot \frac{1}{2} \cdot \frac{1}{2!}(\frac{1}{4}x)^2 + \dots$	M1	correct binomial coeffs for $n = 3/2$ ie 1, $3/2$, $3/2$. $1/2$. $1/2$! Not nCr form Indep of coeff of x Indep of first M1
			=8+3x	A1	8+3x www
			$+3/16 x^{2}$	A1	$\dots + 3/16 x^2$ www Ignore subsequent terms
			Valid for $-4 < x < 4$ or $ x < 4$	B1	accept \leq s or a combination of $<$ and \leq , but not $-4 > x > 4$, $ x > 4$, or say $-4 < x$ condone $-4 < x < 4$ Indep of all other marks
					Allow MR throughout this question for $n = m/2$ where $m \in N$, and m odd and then -1 MR provided it is at least as difficult as the original.
				[5]	

G	Question		Answer						Marks	Guidance
3	(i)		$\begin{array}{c c} x & 0 \\ y & 0 \end{array}$	0.1963 0.4493	0.3927 0.6792	0.5890 0.9498	0.7854 1.3254		B2,1,0	For values 0.4493,0.6792,0.9498 (4dp or better soi) [accept truncated to 4 figs after dec point]
										[cannot assume values of form $(\pi/16)^3 + \sqrt{(\sin \pi/16)}$ are correct unless followed by correct total at some later stage as some will be in degree mode]
			$A = (\pi/3)$	2) [(0+1.3	254) +2(0.4493 +	0.6792 + 0).9498)]	M1	Use of the trapezium rule. Trapezium rule formula for 4 strips must be seen, with or without substitution seen. Correct <i>h</i> must be soi. [accept separate trapezia added]
			= 0.53	8					A1	0.538 www 3dp only (NB using 1.325 is ww)
										SC B0 0.538 without any working as no indication of strips or method used
										SC B1 0.538 with some indication of 4 strips but no values seen Correct values followed by 0.538 scores B2 B0
										Correct values followed by correct formula for 4 strips, with or without substitution seen, then $A=0.538$ scores 4/4.
										Correct formula for 4 strips and values of form $((\pi/16)^3 + \sqrt{(\sin\pi/16)}$ followed by correct answer scores 4/4 (or ³ / ₄ with wrong dp)
										NB Values given in the table to only 3dp give apparently the correct answer, but scores B0,M1A0 ww
									[4]	
3	(ii)		Not post curve of	sible to say,	eg some t	trapezia ar	e above an	d some below	B1	Need a reason. Must be without further calculation.
									[1]	

C	Question		Answer	Marks	Guidance
4	(i)		EITHER Use of $\cos = 1/\sec (\text{or sin} = 1/\text{cosec})$ From RHS $1 - \tan \alpha \tan \beta$	B1	Must be used
			$\frac{1 - \sin \alpha \tan \beta}{\sec \alpha \sec \beta}$ $= \frac{1 - \sin \alpha / \cos \alpha . \sin \beta / \cos \beta}{1 / \cos \alpha . 1 / \cos \beta}$ $= \cos \alpha \cos \beta (1 - \frac{\sin \alpha \sin \beta}{\cos \alpha \cos \beta})$ $= \cos \alpha \cos \beta - \sin \alpha \sin \beta$	M1	Substituting and simplifying as far as having no fractions within a fraction [need more than $\frac{1-tt}{\sec \sec} = cc - ss$ ie an intermediate step that can lead to cc-ss]
			$=\cos(\alpha+\beta)$	A1	Convincing simplification and correct use of $cos(\alpha + \beta)$ Answer given
			OR From LHS, $\cos = 1/\sec \text{ or } \sin = 1/\csc \text{ used}$ $\cos(\alpha + \beta)$ $= \cos \alpha \cos \beta - \sin \alpha \sin \beta$ $= \frac{1}{\sec \alpha \sec \beta} - \sin \alpha \sin \beta$	B1	
			$=\frac{1-\sec\alpha\sin\alpha\sec\beta\sin\beta}{\sec\alpha\sec\beta}$	M1	Correct angle formula and substitution and simplification to one term OR eg $\cos\alpha\cos\beta - \sin\alpha\sin\beta$ = $\cos\alpha\cos\beta(1 - \tan\alpha\tan\beta)$
			$=\frac{1-\tan\alpha\tan\beta}{\sec\alpha\sec\beta}$	A1	Simplifying to final answer www Answer given
				[3]	Or any equivalent work but must have more than cc–ss = answer.

4754A

G	Question		Answer	Marks	Guidance
4	(ii)		$\beta = \alpha$ $\cos 2\alpha = \frac{1 - \tan^2 \alpha}{\sec^2 \alpha}$	M1	$\beta = \alpha$ used , Need to see sec ² α
			$=\frac{1-\tan^2\alpha}{1+\tan^2\alpha}$	A1	Use of $\sec^2 \alpha = 1 + \tan^2 \alpha$ to give required result Answer Given
			OR, without Hence, $\cos 2\alpha = \cos^{2} \alpha (1 - \frac{\sin^{2} \alpha}{\cos^{2} \alpha})$ $= \frac{1}{\sec^{2} \alpha} (1 - \tan^{2} \alpha)$ $= \frac{1 - \tan^{2} \alpha}{1 + \tan^{2} \alpha}$	M1	Use of $\cos 2\alpha = \cos^2 \alpha - \sin^2 \alpha$ soi Simplifying and using $\sec^2 \alpha = 1 + \tan^2 \alpha$ to final answer Answer Given Accept working in reverse to show RHS=LHS, or showing equivalent
				[2]	
4	(iii)		$\cos 2\theta = \frac{1}{2}$ $2\theta = 60^{\circ}, 300^{\circ}$	M1	Soi or from $\tan^2\theta = 1/3$ oe from $\sin^2\theta$ or $\cos^2\theta$
			$\theta = 30^\circ, 150^\circ$	A1	First correct solution
				A1	Second correct solution and no others in the range
					SC B1 for $\pi/6$ and $5\pi/6$ and no others in the range
				[3]	

4754A

Q	Question		Answer	Marks	Guidance
5	(i)		EITHER		
			$x = e^{3t}, y = te^{2t}$	B1	soi
			$\mathrm{d}y /\mathrm{d}t = 2t\mathrm{e}^{2t} + \mathrm{e}^{2t}$	M1	Their $dy/dt \div dx/dt$ in terms of t
			$\Rightarrow dy/dx = (2te^{2t} + e^{2t})/3e^{3t}$	A1	oe cao allow for unsimplified form even if subsequently cancelled incorrectly ie can isw
			when $t = 1$, $dy/dx = 3e^2/3e^3 = 1/e$	A1	cao www must be simplified to 1/e oe
			OR		
			$3t = \ln x, \ y = \frac{\ln x}{3} e^{2/3\ln x} = \frac{x^{2/3} \ln x}{3}$	B1	Any equivalent form of y in terms of x only
			$d_{11}/d_{12} = \frac{1}{2} e^{2/3} \frac{1}{2} + 4e e^{2} e^{-1/3}$	M1	Differentiating their y provided not eased ie need a product including
			$\frac{dy}{dx} = \frac{-x}{3} \frac{-+\ln x}{x} = \frac{x}{9}$		ln kx and x^p and subst $x = e^{3t}$ to obtain dy/dx in terms of t
			$=\frac{1}{3e^{t}}+\frac{2t}{3e^{t}}$	A1	oe cao
			dy/dx = 1/3e + 2/3e = 1/e	A1	www cao exact only must be simplified to $1/e$ or e^{-1}
				[4]	
5	(ii)		$3t = \ln x \Longrightarrow t = (\ln x)/3$	B1	Finding t correctly in terms of x
			$y = (\ln x) / 3e^{(2\ln x)/3}$	M1	Subst in y using their t
			$y = \frac{1}{3}x^{\frac{2}{3}}\ln x$	A1	Required form $ax^b \ln x$ only
					NB If this work was already done in 5(i), marks can only be scored in 5(ii) if candidate specifically refers in this part to their part (i).
				[3]	

Question		Answer	Marks	Guidance
6		$y = (1 + 2x^2)^{\frac{1}{3}} \Longrightarrow y^3 = 1 + 2x^2$		
		$\Rightarrow x^2 = \frac{1}{2}(y^3 - 1)$	M1	finding x^2 (or x) correctly in terms of y
		$V = \int_{1}^{2} \pi x^{2} dy = \frac{1}{2} \pi \int_{1}^{2} (y^{3} - 1) dy$	M1	For M1 need $\int \pi x^2 dy$ with substitution for their x^2 (in terms of y only) Condone absence of dy throughout if intentions clear. (need π)
			A1	www For A1 it must be correct with correct limits 1 and 2, but they may appear later
		$= \frac{1}{2}\pi \left[\frac{1}{4}y^4 - y\right]_1^2 = \frac{1}{2}\pi(2 + \frac{3}{4})$ $= \frac{11}{8}\pi$	B1 M1	$1/2[y^4/4 - y]$ independent of π and limits substituting both their limits in correct order in correct expression, condone a minor slip for M1 (if using $y = 0$ as lower limit then '-0' is enough)
			A1 [6]	condone absence of π for M1 oe exact only www (1 ³ / ₈ π or 1.375 π)

Q	Question		Answer	Marks	Guidance
7	(i)		$AB = \sqrt{5^2 + (-2)^2} = \sqrt{29}$	B1	5.39 or better (condone sign error in vector for B1)
			$AC = \sqrt{3^2 + 4^2} = 5$	B1	Accept $\sqrt{25}$ (condone sign error in vector for B1)
			$\begin{pmatrix} 5\\0 \end{pmatrix} \begin{pmatrix} 3\\4 \end{pmatrix}$	M1	$\cos\theta = \frac{\text{scalar product of AB with AC}}{ AB . AC }$ (accept BA/CA)
					with substitution
			$\cos\theta = \frac{(-2)}{\sqrt{22}} = \frac{15+0+0}{\sqrt{22}} = 0.5571$		condone a single numerical error provided method is clearly understood
			$\sqrt{29.5}$ $5\sqrt{29}$		[OR Cosine Rule, as far as $\cos \theta$ = correct numerical expression]
				A1	www ± 0.5571, 0.557, $15/5\sqrt{29}$, $15/\sqrt{25}\sqrt{29}$ oe or better soi (± for method only)
			$\Rightarrow \theta = 56.15^{\circ}$	A1	www Accept answers that round to 56.1° or 56.2° or 0.98 radians (or better)
					NB vector 5i+0j+2k leads to apparently correct answer but loses all A marks in part(i)
			Area = $\frac{1}{2} \times 5 \times \sqrt{29} \times \sin \theta$	M1	Using their AB,AC, \angle CAB. Accept any valid method using trigonometry
			= 11.18	A1	Accept $5\sqrt{5}$ and answers that round to 11.18 or 11.19 (2dp) www
					or SCA1 for accurate work soi rounded at the last stage to 11.2 (but not
					from an incorrect answer, say from an incorrect angle or from say
					11.17 or 11.22 stated and rounded to 11.2) We will not accept inaccurate work from over rounded answers for the final mark
				[7]	indecutive work from over rounded answers for the final fildrk.
				[/]	

G	Question		Answer	Marks	Guidance
7	(ii)	(A)	$\overrightarrow{AB} \cdot \begin{pmatrix} 4 \\ -3 \\ 10 \end{pmatrix} = \begin{pmatrix} 5 \\ 0 \\ -2 \end{pmatrix} \begin{pmatrix} 4 \\ -3 \\ 10 \end{pmatrix} = 5.4 + 0.(-3) + (-2).10 = 0$	B1	Scalar product with one vector in the plane with numerical expansion shown.
			$\overrightarrow{AC} \cdot \begin{pmatrix} 4 \\ -3 \\ 10 \end{pmatrix} = \begin{pmatrix} 3 \\ 4 \\ 0 \end{pmatrix} \cdot \begin{pmatrix} 4 \\ -3 \\ 10 \end{pmatrix} = 3 \times 4 + 4 \times (-3) + 0 \times 10 = 0$	B1	Scalar product, as above, with evaluation, with a second vector. NB vectors are not unique
					SCB2 finding the equation of plane first by any valid method (or using vector product) and then clearly stating that the normal is proportional to the coefficients.
					SC For candidates who substitute all three points in the plane 4x-3y+10z = c and show that they give the same result, award M1 If they include a statement explaining why this means that $4i-3j+10k$ is normal they can gain A1.
				[2]	
7	(ii)	(<i>B</i>)	4x - 3y + 10z = c	M1	Required form and substituting the co-ordinates of a point on the plane
			$\Rightarrow 4x - 3y + 10z + 12 = 0$	A1	oe If found in (A) it must be clearly referred to in (B) to gain the marks. Do not accept vector equation of the plane, as 'Hence'.
					4i-3j+10k = -12 is M1A0
				[2]	

4754A

G	Question		Answer	Marks	Guidance
7	(iii)		$\mathbf{r} = \begin{pmatrix} 0\\4\\5 \end{pmatrix}$	B1	Need $\mathbf{r} = \left(\operatorname{or} \begin{pmatrix} x \\ y \\ z \end{pmatrix} \right)$
			$+\lambda \begin{pmatrix} 4\\ -3\\ 10 \end{pmatrix}$	B1	oe
			Meets $4x - 3y + 10z + 12 = 0$ when	M1	Subst their 4λ , $4 - 3\lambda$, $5+10\lambda$ in equation of their plane from (ii)
			$16\lambda - 3(4 - 3\lambda) + 10(5 + 10\lambda) + 12 = 0$ $\Rightarrow 125\lambda = -50, \ \lambda = -0.4$	A1	$\lambda = -0.4$ (NB not unique)
			So meets plane ABC at $(-1.6, 5.2, 1)$	A1	cao www (condone vector)
				[5]	
7	(iv)		height = $\sqrt{(1.6^2 + (-1.2)^2 + 4^2)} = \sqrt{20}$	B1ft	ft their (iii)
			volume = $11.18 \times \sqrt{20} / 3 = 16.7$	B1cao	50/3 or answers that round to 16.7 www and not from incorrect answers from (iii) ie not from say (1.6,2.8,9)
				[2]	

C	Question		Answer	Marks	Guidance
8	(i)		Either $h = (1 - \frac{1}{2} At)^2 \Rightarrow dh/dt = -A (1 - \frac{1}{2} At)$	M1	Including function of a function, need to see middle step
			$=-A\sqrt{h}$	A1	AG
			when $t = 0$, $h = (1 - 0)^2 = 1$ as required	B1	
			OR		
			$\int \frac{\mathrm{d}h}{\sqrt{h}} = \int -A\mathrm{d}t$	M1	Separating variables correctly and integrating
			$2h^{1/2} = -At + c$	A1	Including <i>c</i> . [Condone change of <i>c</i> .]
			$h = \left(\frac{-At+c}{2}\right)^2$ at $t = 0, h = 1, 1 = (c/2)^2 \Longrightarrow c = 2, h = (1 - At/2)^2$	B1	Using initial conditions AG
				[3]	
8	(ii)		When $t = 20, h = 0$	M1	Subst and solve for A
			$\Rightarrow 1 - 10 A = 0, A = 0.1$	A1	cao
			When the depth is 0.5 m, $0.5 = (1 - 0.05t)^2$	M1	substitute $h=0.5$ and their A and solve for t
			\Rightarrow 1-0.05t = $\sqrt{0.5}$, t = (1 - $\sqrt{0.5}$)/0.05 = 5.86s	A1	www cao accept 5.9
				[4]	

C	Question		Answer	Marks	Guidance
8	(iii)		$\frac{dh}{dt} = -B \frac{\sqrt{h}}{(1+h)^2}$ $\Rightarrow \int \frac{(1+h)^2}{\sqrt{h}} dh = -\int B dt$	M1	separating variables correctly and intend to integrate both sides (may appear later) [NB reading $(1+h)^2$ as $1+h^2$ eases the question. Do not mark as a MR] In cases where $(1+h)^2$ is MR as $1+h^2$ or incorrectly expanded, as say $1+h+h^2$ or $1+h^2$, allow first M1 for correct separation and attempt to integrate and can then score a max of M1M0A0A0A1 (for $-Bt+c$) A0A0, max 2/7.
			EITHER, LHS		
			$\int \frac{1+2h+h^2}{\sqrt{h}} \mathrm{d}h$	M1	expanding $(1+h)^2$ and dividing by \sqrt{h} to form a one line function of h (indep of first M1) with each term expressed as a single power of h eg must simplify say $1/\sqrt{h+2h}/\sqrt{h} + h^2\sqrt{h}$, condone a single error for M1 (do not need to see integral signs)
			$= \int (h^{-1/2} + 2h^{1/2} + h^{3/2}) dh$	A1	$h^{-1/2} + 2h^{1/2} + h^{3/2}$
			J		cao dep on second M only -do not need integral signs
			OR ,LHS, EITHER		
			$(1+2h+h^2)2h^{1/2} - \int 2h^{1/2}(2+2h)dh$	M1	using $\int u dv = uv - \int v du$ correct formula used correctly, indep of first
			•		M1 condone a single error for M1 if intention clear
			OR		
			$h^{1/2} + h^{3/2} + \frac{h^{5/2}}{3} + \int \frac{1}{2} h^{-3/2} (h + h^2 + \frac{h^3}{3}) dh$	A1	cao oe
			$2h^{1/2} + \frac{4h^{3/2}}{3} + \frac{2h^{5/2}}{5}$	A1	cao oe, both sides dependent on first M1 mark
			=-Bt+c	A1	cao need $-Bt$ and c for second A1 but the constant may be on either side
			$\Rightarrow 2h^{1/2} + 4h^{3/2}/3 + 2h^{5/2}/5 = -Bt + c$		
			When $t = 0$, $h = 1 \Longrightarrow c = 56/15$	A1	from correct work only (accept 3.73 or rounded answers here but not for
					final A1) or $c = -56/15$ if constant on opposite side.
			$\Rightarrow h^{1/2}(30 + 20h + 6h^2) = 56 - 15Bt *$	A1	NB AG must be from all correct exact work including exact c.
				[7]	

Question		on	Answer		Guidance		
8	(iv)		h = 0 when $t = 20$	M1	Substituting $h = 0, t = 20$		
			$\Rightarrow B = 56/300 = 0.187$	A1	Accept 0.187		
			When $h = 0.5$ $56 - 2.8t = 29.3449$		Subst their $h = 0.5$, ft their B and attempt to solve		
			$\Rightarrow t = 9.52s$	A1	Accept answers that round to 9.5s www.		
				[4]			

4754B

Question		ion	Answer				Marks	Guidance		
1	(i)							B1	for all three entries 30,60,45 correct	
			Group	Р	Q	R	S		DI	
			Number of people	15	30	60	45		B1	for all three entries 1.5, 3, 9 correct
			Average number of accidents in a year	1.5	4.5	3	9			
									B1	for 3000,4500 both correct
			Average cost of accidents per year	£7500	£9000	£3000	£4500			SC B2 for all entries in any three columns correct
								<u>_</u>	[3]	
1	(ii)		£24000÷150			M1	Adding their bottom row (7500 + 9000 + '3000' + '4500' = '24000' and dividing by 150 soi (and not divided or multiplied by any additional values)			
			=£160				A1	ft their 24000 ÷ 150 (corr to 2dp if inexact)		
									[2]	
1	(iii)		The 45 members of Group S pay $1.5 \times \pounds 4500 = \pounds 6750$.				M1	their 4500×1.5 oe soi as part of solution		
			So each pays $\pounds 6750 \div 45$							
			=£150.				A1	cao www (must be from correct final column)		
							[2]			

4754B

G	luestion		A	nswer	Marks	Guidance
2		Basic premium	n = 35% of driver's pred	nium	M1	use of 35% or 0.35 oe [not 65, 0.65 unless 1–0.65]
		Drivers premit	um = Basic premium ÷	$0.35 = 2.86$ Basic premium $\Rightarrow k = 2.86$	A1	accept 2.86 or better (k= 2.85714 or $26/_{7}$ oe)
						[k = 2.9, k = 1/0.35 scores M1A0]
					[2]	
3				1		
		Year	% discount			
		2007	0			
		2008	30			
		2009	40			
		2010	50		B1	obtaining 310 or 3.1 oe
		2011	60			[trom adding all relevant terms ie $0+30+40+50+60+65+65-310$
		2012	65			or $0 + 0.3 + 0.4 + 0.5 + 0.6 + 0.65 + 0.65 = 3.1$ soi
		2013	65			(with or without first zero term)
		Total	310			or from 700–100–70–60–50–40–2×35 oe]
		310% of the p	remium is £3875			
			$\pounds 3875 \times 100$		M1	3875 ÷ their 3.1 even if one term was missing from
		The premium	is 310			addition but must come from attempt at the appropriate addition [ie an error in adding to 310 or an omission of one term, an inclusion of say an extra 65,or an addition of 100,70,60,etc with subsequent subtraction from 700]
			=£1250		A1	£1250 cao
					[3]	

4754B

Question		Answer	Marks	Guidance
4	(i)	50 Percentage 45 40 35 30 25 20 15 10 5 0 18 22 26 30 34 38 42 46	B1	A sketch. Must be at least for values of x between 18 and 45. Must be correct shape ie descending curve, does not curve up at end, does not cross the horizontal axis (even if extended) ie must \rightarrow 1. Does not need to go through points exactly as a sketch.
4	(ii)	For large values of x, $be^{-k(x-17)} \rightarrow 0$, and so $y \rightarrow a$ which is 1 in this case.	B1	Need x becoming large or $\rightarrow \infty$, exponential term $\rightarrow 0$ oe and $y \rightarrow a$, $a = 1$ or $y = 1, a = 1$ oe NOT just at $x = 45, y = 1$
4	(iii)	Substituting $x = 23 \implies y = 6.6$	M1	subst $x = 23$ and finding $y = 6.6$ (6.60115) (or subst $y = 6$ and finding $x = 23.3$ (23.3097) Only accept comparing x or y , not coefficients
		This is quite close to the observed value of $y = 6$.	[2]	(or close to $x = 23$) Accept say, $y = 6.6 \approx 6$. But not say at $x = 23$, $y \approx 6$ with no evaluation seen Accept if states, say, $y = 6.6$ which is not consistent with $y = 6$ oe

4754B

Question		ion	Answer	Marks	Guidance
5	(A)		With no more than 3 points on his licence the driver's premium is not altered: £520	B1	£520
	(<i>B</i>)		The driver now has $3 + 6 = 9$ points. The new premium is $\pounds 520 \times 2^{\frac{9}{6}} = \pounds 1470.78$	B1	£1470.78 or £1471 [but not £1470.80]
				[2]	