Question number	Scheme	Marks
7. **(a)**	x: 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 y: 2 | **3.79** | 4.40 | 4.77 | 5.04 | **5.26** | 5.43 | **5.58**	B1B1 (2)
(b)	Correct points plotted	B1B1 (2)
(c)	$\ln(5x+1)=x \Rightarrow \ln(5x+1)+2=x+2$ Line $y=x+2$ drawn $\Rightarrow x=2.6$ or 2.7	M1M1A1 (3)
(d)	$e^{(3x-1)}=5x+1 \Rightarrow 3x-1=\ln(5x+1) \Rightarrow 3x+1=\ln(5x+1)+2$ Line $y=3x+1$ drawn on graph $\Rightarrow x=0.9$	M1M1 M1A1 (4)
		(11)

Notes

(a)	B1	For any two of three correct values, correctly rounded
	B1	For all three correct values, correctly rounded
NB: Accept for B0B1 three values which all round to the correctly rounded values.		
(b)	B1ft	Their points plotted correctly to within half of one square
	B1ft	Their points joined up in a smooth curve from $x = 1$ onwards. Allow a straight line between $x = 0$ and 1.
Note: these follow through marks are from their table only.		
(c)	M1	For forming the linear equation $\ln(5x+1)+2=x+2$ or for identifying that the line with equation $y=x+2$ is required. This can be implied from a correct line drawn.
	M1	For drawing their '$y=x+2$' Coordinates of the correct line $y=x+2$ are (0,2) , (1,3) , (2,4) , (3,5) etc
	A1	For $x = 2.6$ or 2.7 (Note: must be 1 dp)
(d)	M1	For taking natural logarithms of both sides of the given equation to give $3x-1=\ln(5x+1)$
	M1	For forming the linear equation $\ln(5x+1)+2=3x+1$ or for identifying that the line with equation $y=3x+1$ is required. This can be implied from a correct line drawn.
	M1	For drawing their '$y=3x+1$'. Coordinates of the correct line $y=3x+1$ are (0,1), (1,4)
	A1	For $x =$ 0.9 Do not penalise rounding in (d) if penalised in (c). The value in (d) must round to 0.9.