Question	Answer	Marks	Partial Marks
1	$x^2 + 3x - 10 - 3x - 6$ * 0 oe	**M1**	Condone one sign or arithmetic error * can be = or any inequality sign
	Critical Values: 4 and –4	**A1**	
	$x > 4$ or $x < -4$	**A1**	Mark final answer
2	Eliminate one unknown $x(11-3x)+x^2=15$	**M1**	
	$2x^2-11x+15[=0]$	**A1**	
	Factorises or solves *their* 3-term quadratic	**M1**	
	$x=\frac{5}{2},\ y=\frac{7}{2}$ $x=3,\ y=2$	**A2**	**A1** for $x=\frac{5}{2}, x=3$ nfww or $y=\frac{7}{2}, y=2$ nfww
3(a)	$\frac{\mathrm{d}}{\mathrm{d}x}(\sin 3x)=3\cos 3x$ soi	**B1**	
	Applies the correct form of the quotient rule	**M1**	
	$\frac{\mathrm{d}y}{\mathrm{d}x}=\frac{(x+1)(3\cos 3x)-(2+\sin 3x)[1]}{(x+1)^2}$	**A1**	**FT** *their* $\frac{\mathrm{d}}{\mathrm{d}x}(\sin 3x)$
	$\frac{\mathrm{d}y}{\mathrm{d}x}=\frac{\left(\frac{\pi}{6}+1\right)\left(3\cos\frac{3\pi}{6}\right)-\left(2+\sin\frac{3\pi}{6}\right)[1]}{\left(\frac{\pi}{6}+1\right)^2}$	**M1**	
	$\left[\frac{\mathrm{d}y}{\mathrm{d}x}=\right]\ \frac{-3}{\left(\frac{\pi}{6}+1\right)^2}$	**A1**	not from wrong working