

Q	Marking Instructions	AO	Marks	Typical Solution
6	Selects appropriate technique to differentiate	AO3.1a	M1	$2(x + y - 2) \left(1 + \frac{dy}{dx} \right) = e^y \frac{dy}{dx}$ $\frac{dy}{dx} = 0 \Rightarrow x + y - 2 = 0$ $\Rightarrow 0 = e^y - 1$ $y = 0$ $x = 2$
	Differentiates term involving e^y correctly	AO1.1b	B1	
	Differentiates fully correctly	AO1.1b	A1	
	Uses $\frac{dy}{dx} = 0$	AO1.1a	M1	
	Eliminates x or y from the equation of the curve	AO1.1a	M1	
	Obtains correct y CAO	AO1.1b	A1	
	Obtains correct x CAO	AO1.1b	A1	
	Total		7	