

Question Number	Scheme	Marks
<b>7</b>		
<b>(a)</b>	$\frac{y-2}{6-2} = \frac{x-3}{1-3}$ $-2(y-2) = 4(x-3)$ $y+2x=8$	M1A1   A1 (3)
<b>(b)</b>	$(8-2x)x=8$ $x^2-4x+4=0$ $(x-2)(x-2)=0$ <p>equal roots <math>\therefore</math> tangent</p>	M1   M1 A1 (3)
<b>(c)</b>	$x=2, y=4$	B1B1 (2)
<b>(d)</b>	$\text{grad tgt} = -2$ $\text{grad normal} = \frac{1}{2}$ $\text{Equation normal : } y-4 = \frac{1}{2}(x-2)$ $2y = x+6 \text{ (oe integer coeffs only)}$	B1  M1  A1 (3)
		[11]