

8	(b)	<p>DR</p> $\text{Area} = \int_0^1 (x^3 - (3x - 2)) \, dx$ $\left[\frac{x^4}{4} - \frac{3x^2}{2} + 2x \right]_0^1$ $\frac{3}{4}$	<p>M1 M1</p> <p>M1</p> <p>A1</p>	<p>3.1a 1.1</p> <p>1.1</p> <p>2.2a</p>	<p>Integrand. FT their tangent Limits (may be seen later)</p> <p>Allow one error</p>	
		<p>Alternative method</p> <p>Area between curve and x-axis =</p> $\int_0^1 x^3 \, dx = \left[\frac{x^4}{4} \right]_0^1 = \left[\frac{1}{4} \right]$ <p>Area triangle ABD = $\frac{1}{2} \times \frac{1}{3} \times 1 = \frac{1}{6}$</p> <p>Area = area between curve and x-axis + triangle ODE – triangle ABD</p> $\frac{3}{4}$	<p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p>		<p>Using <i>their</i> values</p>	
			<p>[4]</p>			