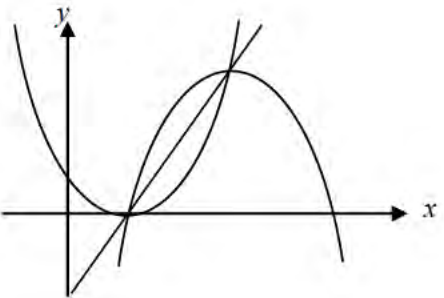
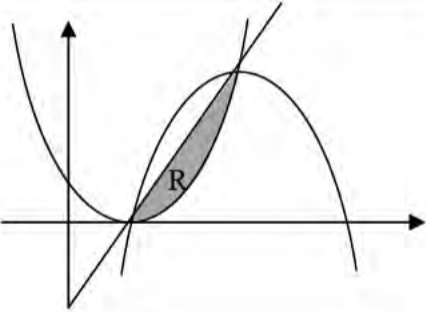


<b>3</b>	<b>(a)</b>	<p><b>DR</b></p> $2x^2 - 8x + 6 = 0$ $x^2 - 4x + 3 = 0$ $(x - 1)(x - 3) = 0$  $x = 1, x = 3$ $(1, 0) \text{ and } (3, 4)$	<b>M1</b>	<b>1.1</b>	Equate, and rearrange to three term quadratic	<p>Attempt to gather like terms, but not necessarily on same side of equation          Condone no '='          If factorising then expansion should give <math>x^2</math> and one other term correct          Quadratic formula should be correct – allow one slip when substituting as long as general formula already seen as correct          Completing the square needs to go as far as <math>x - p = \pm\sqrt{q}</math>          Or one correct <math>(x, y)</math> coordinate following a correct factorisation oe          Allow as eg <math>x = 1, y = 0</math> as long as pairings are clear</p>
			<b>M1</b>	<b>1.1</b>	Attempt to solve quadratic	
			<b>A1</b>	<b>1.1</b>	Obtain both correct $x$ values	
			<b>A1</b>	<b>1.1</b>	Obtain both correct pairs of coordinates	

Question			Answer	Marks	AO	Guidance
				[4]		<p>SC If no method shown for solving quadratic then allow</p> <p><b>M1</b> for obtaining 3 term quadratic</p> <p><b>A1</b> for <math>x = 1, x = 3</math></p> <p><b>A1</b> for <math>(1, 0)</math> and <math>(3, 4)</math></p> <p>SC If no method at all shown then allow <b>B1</b> for both <math>(1, 0)</math> and <math>(3, 4)</math></p>
3	(b)		<p><b>M1</b></p> <p><b>A1</b></p> <p>[2]</p>	<p><b>1.1</b></p> <p><b>1.1</b></p>	<p>Attempt graph of <math>y = 2x - 2</math>, with positive gradient and negative intercept</p> <p>Graph of <math>y = 2x - 2</math> passing through both points of intersection of the two quadratic graphs</p>	<p>No need for line to actually intersect with negative <math>y</math>-axis as long as it goes beneath positive <math>x</math>-axis</p> <p>Must pass through both points</p>

Question			Answer	Marks	AO	Guidance
3	(c)			<b>B1FT</b>	<b>2.2a</b>	<p>Correct region labelled with R, or otherwise clearly identified</p> <p>FT any straight line that splits the overlap area into two finite regions, with the lower region identified</p> <p>Allow for straight line with negative gradient as well, but not <math>x = k</math></p>
				<b>[1]</b>		