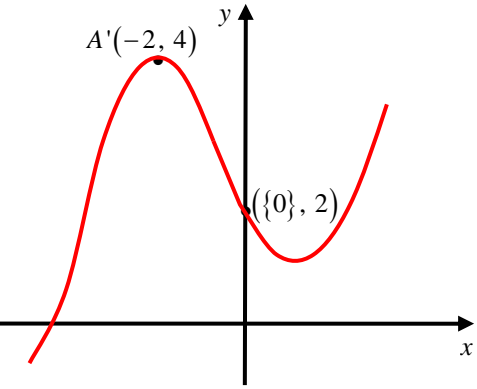

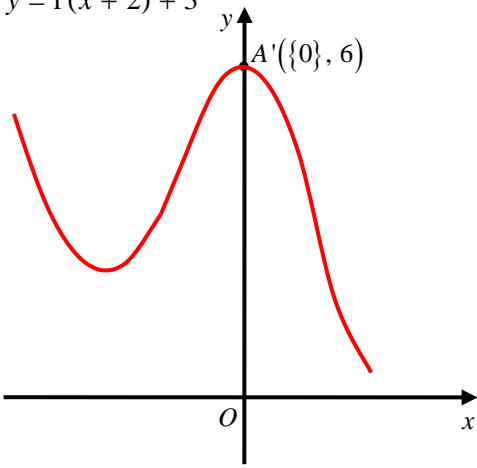
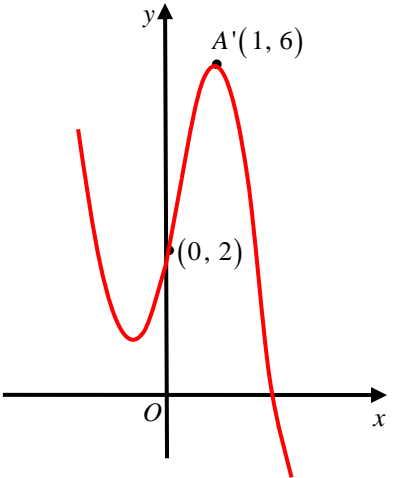
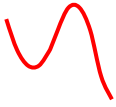


Question Number	Scheme	Marks
(i)	<p><math>y = f(-x) + 1</math></p>  <p>Shape of </p> <p>and must have a maximum in quadrant 2 and a minimum in quadrant 1 or on the positive y-axis.</p> <p>Either <math>(\{0\}, 2)</math> or <math>A'(-2, 4)</math></p> <p>Both <math>(\{0\}, 2)</math> and <math>A'(-2, 4)</math></p>	<p>B1</p> <p>B1</p> <p>B1</p> <p>(3)</p>
(ii)	<p><math>y = f(x + 2) + 3</math></p>  <p>Any translation of the original curve.</p> <p>The <i>translated maximum</i> has either x-coordinate of 0 (can be implied) or y-coordinate of 6.</p> <p>The translated curve has maximum <math>(\{0\}, 6)</math> and is in the correct position on the Cartesian axes.</p>	<p>B1</p> <p>B1</p> <p>B1</p> <p>(3)</p>
(iii)	<p><math>y = 2f(2x)</math></p>  <p>Shape of </p> <p>with a minimum in quadrant 2 and a maximum in quadrant 1.</p> <p>Either <math>(\{0\}, 2)</math> or <math>A'(1, 6)</math></p> <p>Both <math>(\{0\}, 2)</math> and <math>A'(1, 6)</math></p>	<p>B1</p> <p>B1</p> <p>B1</p> <p>(3)</p>
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