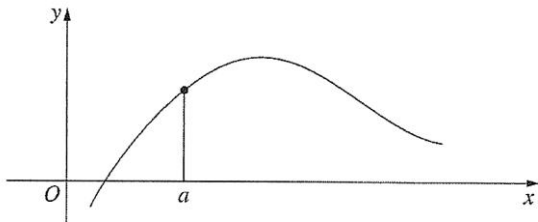


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12	4	<p>The diagram shows the graph of <math>y = f(x)</math>. Which of the following statements is true?</p> <p>(A) <math>f'(a) &gt; 0</math> and <math>f''(a) &lt; 0</math></p> <p>(B) <math>f'(a) &gt; 0</math> and <math>f''(a) &gt; 0</math></p> <p>(C) <math>f'(a) &lt; 0</math> and <math>f''(a) &lt; 0</math></p> <p>(D) <math>f'(a) &lt; 0</math> and <math>f''(a) &gt; 0</math></p>	 <p>The diagram shows a Cartesian coordinate system with a curve <math>y = f(x)</math>. The origin is labeled <math>O</math>. A point <math>a</math> is marked on the <math>x</math>-axis. A vertical line segment connects the point <math>a</math> on the <math>x</math>-axis to the curve. The curve is increasing at <math>x = a</math> and is concave down at that point.</p>	1
<div><b>A</b></div> <div>At <math>x = a</math>, curve is <i>increasing</i> and <i>concave down</i>. <math>\therefore f'(a) &gt; 0</math> and <math>f''(a) &lt; 0</math></div> <div>State Mean: <b>0.70</b></div>				

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