

<p>If <math>f'(x) &lt; 0</math> what is true of <math>f(x)</math>?</p>	<p>If <math>f'(x) &gt; 0</math> what is true of <math>f(x)</math>?</p>	<p>Explain how to determine the critical numbers of <math>f(x)</math></p>
<p>If <math>f'(x)</math> is increasing what is true of <math>f(x)</math>?</p>	<p>When does a relative maximum occur at <math>x = a</math>?</p>	<p>When does a relative minimum occur at <math>x = a</math>?</p>
<p>If <math>f''(x) &gt; 0</math> what is true of <math>f(x)</math>?</p>	<p>When does a point of inflection occur at <math>x = a</math>?</p>	<p>If <math>f'(x)</math> is decreasing what is true of <math>f(x)</math>?</p>
<p>If <math>f(x)</math> is decreasing what is true of <math>f'(x)</math>?</p>	<p>On <math>[a, b]</math> where can absolute maximums and minimums occur?</p>	<p>If <math>f''(x) &lt; 0</math> what is true of <math>f(x)</math>?</p>
<p>If <math>f(x)</math> is concave down what is true of <math>f''(x)</math>?</p>	<p>If <math>f(x)</math> is concave up what is true of <math>f''(x)</math>?</p>	<p>If <math>f(x)</math> is increasing what is true of <math>f'(x)</math>?</p>

$f'(x)=0$ or when $f'(x)$ is undefined	$f(x)$ is increasing	$f(x)$ is decreasing
When $f'(x)$ changes from neg. to pos. at $x = a$	When $f'(x)$ changes from pos. to neg. at $x = a$	$f(x)$ is concave up
$f(x)$ is concave down	When $f''(x)$ changes sign at $x = a$	$f(x)$ is concave up
$f(x)$ is concave down	Either at the endpoints or any critical numbers between $a$ and $b$	$f'(x) < 0$
$f'(x) > 0$	$f''(x) > 0$	$f''(x) < 0$