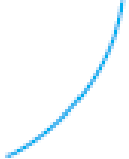




# Aplicações da 2ª Derivada (4.2)

Signs of $f'$ and $f''$	Properties of $f$	General Shape of the Graph of $f$
$f'(x) > 0$ $f''(x) > 0$	$f$ is increasing. The graph of $f$ is concave upward.	
$f'(x) > 0$ $f''(x) < 0$	$f$ is increasing. The graph of $f$ is concave downward.	
$f'(x) < 0$ $f''(x) > 0$	$f$ is decreasing. The graph of $f$ is concave upward.	
$f'(x) < 0$ $f''(x) < 0$	$f$ is decreasing. The graph of $f$ is concave downward.	