Mathematics 122

Quiz #22 Name: Key

You must show your work to get full credit.

Let

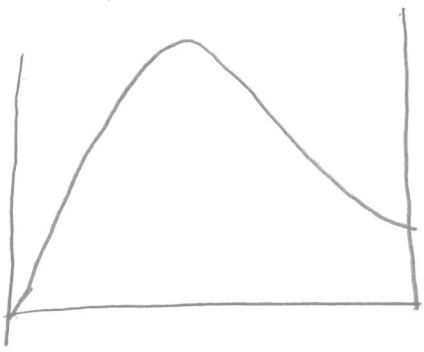
$$f(x) = \frac{x + x^3}{3^{x-1}}.$$

For $0 \leq x \leq 6$ use your calculator to find

\Y1 = (X+X^3)/3^(X-1)

Xmin = 0

Xmax = 6



The maximum of $f(x)$ 3.488

The minimum of $f(x)$ 0

The maximizer of $f(x)$ 2.475

The minimizer of $f(x)$ 0

From the graph we see that the minimizer is $x=0$ and that the minimum is $f(0)=0$

For maximum use 2nd calc maximum