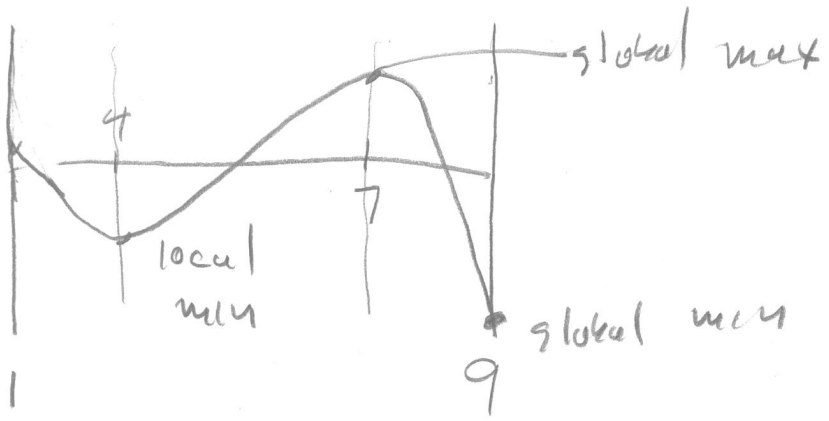
Mathematics 122

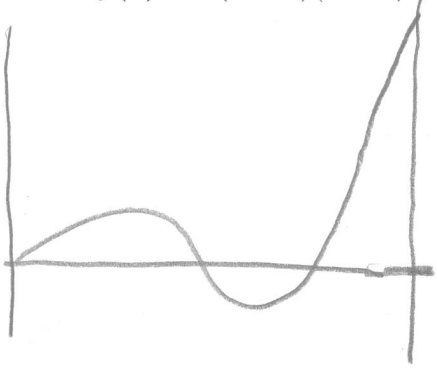
Quiz # 16 Name: Key

You must show your work to get full credit.

1. On the interval $1 \leq x \leq 9$ draw the graph of a function that has a local minimum at $x = 4$, a global maximum at $x = 7$ and a global minimum at $x = 9$.



2. Let $f(x) = x(x-1)(x-2)$ on the interval $0 \leq x \leq 2.5$. Use your calculator to find



Global maximizer of f 2.5

Global maximum of f 1.85

Global minimizer of f 1.5773

Global minimum of f -.38490

$Y1 = X(X-1)(X-2)$

$X_{min} = 0$

$X_{max} = 2.5$

From graph we see global maximumer $= 2.5$

Use 2nd calc value to get $f(2.5) = 1.85$

For minimum use 2nd calc minimum

to get $X = 1.5773$ (minimizer)

$Y = -.38490$ (minimum)