

Job #1:

Determine how to prove that a point on $f(x)$ is a local maximum point using the derivative of $f(x)$.

Write up a clear set of “rules” that someone could follow to determine where “maxima” are for a function using $f'(x)$.

Job #2:

Determine how to prove that a point on $f(x)$ is a local maximum point using the second derivative of $f(x)$. (it's OK to use the first derivative, too...but the second derivative must be needed/used)

Write up a clear set of “rules” that someone could follow to determine where “maxima” are for a function using $f''(x)$.