ID #_____ Section_____ Quiz 4 [MATH 101-T141] Serial:_____

Q 1. Find the intervals where $f(x) = x^{1/3}(x+8)$ is increasing or decreasing. At which points $f(x)$ attains (has) local maximum or local minimum values.

Q 2. Evaluate: $\lim_{x \to 0^+} x^2 \log_2 x$.

Q 3. Find the intervals where $f(x) = 4x^3 - x^4$ is concave up or down. At which points $f(x)$ has Point(s) of Inflection. (*Use other side of the paper*)

ID #_____ Section_____ Quiz 5 [MATH 101-T141] Serial:_____

Q 1. Find the intervals where $f(x) = \frac{x^2-3}{x-2}$ is increasing or decreasing. At which points $f(x)$ attains (has) local maximum or local minimum values.

Q 2. Evaluate: $\lim_{x\to\infty} e^{-x}(\ln x)^2$.

Q 3. Find the intervals where $f(x) = x^4 + 2x^3$ is concave up or down. At which point(s) $f(x)$ has Point(s) of Inflection. (*Use other side of the paper*)