Present neatly ~~on separate paper~~.
Justify for full credit. No Calculators.

Name _____ Score _____ 6 minutes

1)

If $f(x) = |x+2|\,(x-4)$, then the critical point(s) of f are
$x =$

2)

If $x^2 + y^2 = 6$, then $\dfrac{d^2y}{dx^2} =$

3)

$\lim\limits_{x \to 8} \dfrac{\sqrt[3]{x} - 2}{x - 8}$ is

4)

$\lim\limits_{h \to 0} \dfrac{(10+h)^3 - 1000}{h} =$

5)

The maximum value of $f(x) = x^3 + 3x^2 - 9x - 2$ on the interval $[0, 2]$ is