Quiz 9

Name: _____

Instructions: Answer the following questions. When computing derivatives, you do not need to use the definition.

1. (6 pts) Compute the following:

   (a) $\dfrac{d}{dx}\left[2^{x^3-x}\right]$

   (b) $\dfrac{d}{dx}\left[\log(\log(x))\right]$

2. (4 pts) Let $f(x) = \sqrt{x^2 + x + 1}$. Find the absolute maximum and absolute minimum of $f(x)$ on $[-1, 1]$. You may use the fact that $\sqrt{x^2 + x + 1} > 0$ for all real x.