Math 1450, Honor Calculus Practice6, Fall 2016.

September 28, 2016

PSID: _____   Name: _____

1. Calculate the limit $\lim\limits_{x \to 0} \dfrac{e^x - 1}{10 \ln(1 + x)}$.

2. Calculate the limit $\lim\limits_{x \to 0} \dfrac{4x - \sin(\pi x)}{2x^2 - 1}$.

3. Calculate the limit $\lim\limits_{x \to \infty} \dfrac{\ln(x^7)}{x}$.

4. Calculate the limit $\lim\limits_{x \to 1} x^{\left(\frac{8}{x-1}\right)}$.

5. Calculate the limit $\lim\limits_{x \to 0} \left(\dfrac{8}{x} - 8\cot(x) \right)$.

6. Calculate the limit $\lim\limits_{x \to \infty} (x^6 + 1)^{\frac{1}{\ln(x)}}$.