NAME: ———————————————————   **Panther ID:** ———————————

Quiz 3   - MAC 2311, Fall 2015

To receive credit you MUST SHOW ALL YOUR WORK. Answers which are not supported by work will not be considered.

1. (2 pts) Circle True or False? No justification needed.

(a) ∞^∞ is an indeterminate limit form (exceptional case) .   **True**   **False**

(b) 0^0 is an indeterminate limit form (exceptional case) .   **True**   **False**

2. (5 pts) Use an appropriate linear approximation to estimate $\sqrt[3]{7.94}$. Be sure to specify the function and the point you are using.

3. (5 pts) Compute the limit: $\displaystyle\lim_{x \to 0} \frac{1 - e^{-3x^2}}{\sin^2 x}$