

Lecture time: 12 pm

Quiz 4

Quiz time limit: 20 min.

Spring 2015

Your name: _____

Math 0220

Your TA's name: _____

No calculators, no notes, no books are permitted. L'Hospital's rule is not allowed.

SHOW ALL WORK (no work = no credit). Write neatly. Simplify your answers.

1. Use a linear approximation to estimate the number $(8.03)^{2/3}$.

2. [5 points] The half-life of cesium-137 is 30 years. If we have 200-mg sample then how much of it will remain after 50 years? Leave your answer in exact form.

bonus problem [5 points extra] $f(x) = \sin^2 x + 5 \cos^2 x$, $0 \leq x \leq \frac{\pi}{2}$. Find $(f^{-1})'(4)$.
Simplify your answer.