

Math 1A Quiz 6
March 14th, 2008

Name _____ SID _____

1. The half-life of cesium-137 is 30 years. Suppose we have a 100-mg sample.

a) Find the mass that remains after t years.

b) After how long will only 1 mg remain?

2. For each of the following functions f , state whether f has an inverse. If no, explain why not. If yes, find $f^{-1}(4)$.
- a) $f(x) = x^3 - x$.

b) $f(x) = 4x + \sin(x^2 - 1)$.

c) $f(x) = \ln(\ln(x))$.