

MATH 126 SPRING 2011, QUIZ 3

1. Find the limit

a.  $\lim_{x \rightarrow \infty} x \tan(1/x)$

b.  $\lim_{x \rightarrow 0^+} (\cos x)^{1/x^2}$

2. Evaluate the integral

a.  $\int x^5 \ln(x) dx$

b.  $\int_1^4 e^{\sqrt{x}} dx$

c.  $\int_0^{1/2} \sin^{-1}(x) dx.$