

April 29, 2003

Show all work for credit.

Leave all answers as exact answers unless otherwise stated.

1. Evaluate the following.

(a) $\frac{d}{dx} \tan x^2$

(b) $\int_0^1 \sqrt{1-x^2} dx$

(c) $\frac{d}{dx} \sec^2(\arccos e^5)$

2. (bonus) Give the definition of the word "propinquous".