

Honors Problems #10

due on Friday, December 9, 2005

Prove each of the six derivative rules for the inverse trigonometric functions.
Four of the rules are listed on p. 243 of your text, and the other two are listed below.

$$D_x(\operatorname{arc\,cot} x) = \frac{-1}{1+x^2} \qquad D_x(\operatorname{arc\,csc} x) = \frac{-1}{|x|\sqrt{x^2-1}}$$