



CALCULUS I  
FALL 2015

WRITTEN ASSIGNMENT 9  
DUE OCTOBER 2

**Exercise 1.** Prove the formula

$$\frac{d}{dx} \operatorname{arcsec} x = \frac{1}{x\sqrt{x^2 - 1}}$$

by the method we used to differentiate  $\arccos x$  in class. You may assume  $x > 1$ .

**Exercise 2.** Carefully write up your solution to Question 9 of the WA assignment “Implicit Differentiation.”

**Exercise 3.** Carefully write up your solution to Question 10 of the WA assignment “Implicit Differentiation.”