

**MATH 2**  
**PROBLEM OF THE WEEK 1**  
Due Friday, January 24th, 2003 before the quiz.

*Please show all your work!*

Name: \_\_\_\_\_

Find the derivative of

$$f(x) = \sqrt{\cos(\sin^2 x)}.$$

This is a multiple chain rule problem of the kind you've been having trouble with. So, please, be very careful while you're doing this.