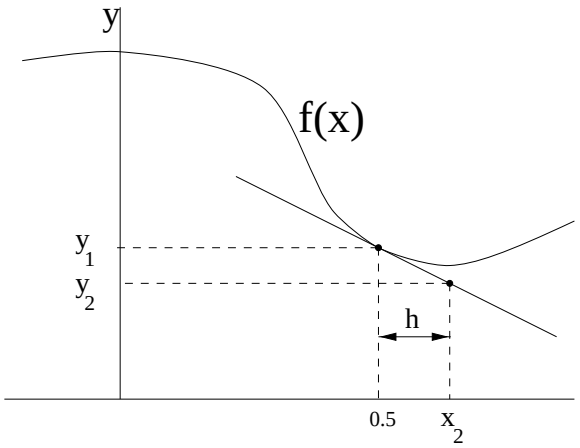
10. (8 points) Let $f(x) = \ln(\sin x)$. Use your calculator and the **limit definition** of the derivative to approximate the instantaneous rate of change of f at x = 1. In order to receive full credit, you must show your work and indicate the values that you use to come up with your approximation. (Note: be sure that your calculator is set to radian mode.)

11. (8 points) In the figure below, it is given that $f(0.5) = 3$, $f'(0.5) = -2$, and $h = 0.1$. Determine the values of y_1, y_2, and x_2.



$y_1 =$ _____

$y_2 =$ _____

$x_2 =$ _____