Undergraduate Problem Solving Contest

Problem 1

Due October 8th, 2013

Let A be a positive constant. If the graph of the function $f(x) = A \sin(x)$ intersects the graph of its derivative perpendicularly, then what does A equal?

In the spirit of UPSC, you should not use the internet or look up the solution in a book. Please include your **name**, **student ID number**, and **email address** on your solution.