## 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.

