



Lewis & Clark College

Department of Mathematical Sciences

Problem of the Week #2 (Fall 2011)

For $0 \leq x \leq \pi$, prove that

$$\sin x \geq x - \frac{x^2}{\pi}.$$

- Solvers should include their name, address, and status at the College. Solutions can be mailed to MSC 110 via campus mail or placed in Yung-Pin Chen's mailbox in the Math Department Office. Solutions to the above *Problem of the Week* should be received by 5:00 p.m. Monday, September 12, 2011.
- Colin Gavin (fr.) partially solved *Problem of the Week* #1. Colin used the Lagrange interpolation algorithm to evaluate $P(n)$, which yields the correct answer for $P(2012)$ but an incorrect answer for $P(2013)$. Congratulations to him.