Problem of the Week #3
9/19/2016 to 10/02/2016

Given 61 points inside a circle of radius 4, prove that some distance between a pair of these points is no greater than $\sqrt{2}$.

Solutions to the last problem were submitted by M.V. Channakeshava (Bengaluru, India), Lloyd Christmas (San Antonio . . . not his real name), Mark Crawford (Sugar Grove, IL), Rob Hill (Gambrills, Maryland), Lincoln James (Chicago, IL), Kipp Johnson (Beaverton, OR), Jack Kennedy (Seattle, WA), Steve King (Pullman, WA), Hari Kishan (India), Yehuda Koslowe (Bergenfield, NJ), Tom O’Neil (Central Coast of CA), Benjamin Phillabaum (Northbrook, IL), and Luciano Santos (Lisboa, Portugal).

Solutions for this problem can be submitted to Dr. Brian Miceli at bmiceli@trinity.edu, or you can drop them off at his office, MMH 115F. People with correct solutions will be acknowledged on the next problem. For old problems, follow the “Problem of the Week” link at www.trinity.edu/bmiceli, and if you like these problems, you may be interested in the Putnam Exam. More information on the Putnam Exam can also be found at www.trinity.edu/bmiceli.