

Cal Poly Department of Mathematics

Puzzle of the Week

Feb 7-13, 2014

Fix a constant $0 \leq r \leq 1$. What is the probability that two real numbers x, y randomly chosen in the interval $[0, 1]$ will be within a distance r from each other? (Here x and y are chosen independently, and with uniform distribution.)

Solutions should be submitted to Morgan Sherman:

*Dept. of Mathematics, Cal Poly
Email: sherman1 -AT- calpoly.edu
Office: bldg 25 room 310*

before next Thursday. Those with correct and complete solutions will have their names listed on the puzzle's web site (see below) as well as in next week's email announcement. Anybody is welcome to make a submission.

<http://www.calpoly.edu/~sherman1/puzzleoftheweek>