Willamette Math
Problem of the Week
March 17 2008
Triangle Triangle

Two triangles are randomly inscribed in the same circle. What is the probability that they intersect?

Submit all solutions before the appearance of the next problem to Josh Laison in person, by e-mail (jlaison@willamette.edu), or by whale call. The first correct solution gets a prize; all correct solutions get fame and glory. Preference for the prize goes to problem-solvers who haven’t won one yet.

Solution to Edgy Hyper Cube: Congratulations to Jai Salzwedel, who solved the problem first and won a potato spud gun, and to Eric Haddenham, who also submitted a correct solution.

An n-dimensional cube has $2^n$ corners. Each corner has $n$ edges incident to it, and each edge is counted by two corners. So there are $n(2^n)/2 = n2^{n-1}$ total edges in the $n$-dimensional cube.

Past problems of the week, solutions, and solvers can be found at http://www.willamette.edu/~jlaison/problem.html