

Problem of the Month, February 2008

Please turn all solutions into Dr. Dunn's office, JB 322. You may slide your solutions under his door as well. Most elegant solution wins a \$10 gift certificate to the bookstore! Solutions will be accepted anytime during the month of February, 2008. Good luck!

One day a restless lion roamed about in his circular cage, of radius 10 meters, along a polygonal path of total length 30 kilometers. Thus, coming to the end of one segment in his path, he would turn and proceed along the next segment in the path. Prove that, counting both turns to the left and turns to the right (considering each angle to be a positive quantity), he must have turned through a total of AT LEAST 2998 radians.