

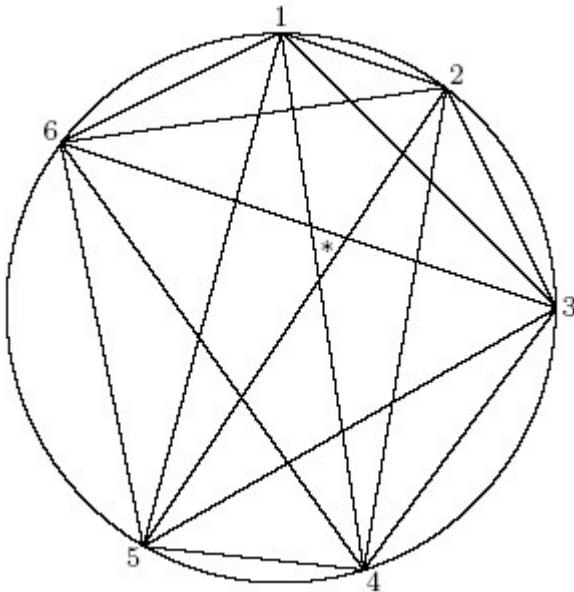
# MATH CHALLENGE PROBLEM

## NOVEMBER

$n$  points are given on the circumference of a circle, and the chords determined by them are drawn. Suppose further that no 3 chords meet at a common point inside the circle.

Let  $t(n)$  be the number of triangle determined by the chords which have all 3 vertices inside the circle.

The diagram shows that  $t(6)=1$ . Find  $t(2004)$ .



Who's eligible: Any one taking a math or statistics course at the U of W

When's it due: November 26<sup>th</sup>, 2004 to departmental office of 7<sup>th</sup> floor

Lockhart Hall

Prize: 1 \$15 gift certificate to Polo Park. Entries will be judged on the merit of the proof. In event of multiple winners, names will be drawn for the prize.