

MATH CHALLENGE PROBLEM

JANUARY

What's the units digit of the real number:
 $(7 + 5\sqrt{2})^{2005}$?

(*N.B. The units digit is the first digit to the left of the decimal place)

Who's eligible: Any student at the University of Winnipeg

When's it due: January 28th, 2005 to departmental office on the 7th floor of 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.