



## Problem of the Week Grade 11 and 12

### Palindrome Possibilities

A *palindrome* is a word or phrase which reads the same frontwards and backwards. “I prefer pi” is an excellent example of a palindrome phrase.

Numbers which remain the same when the digits are reversed are also considered to be palindromes. For example, 1287821 and 4554 are palindromic numbers.

Hannah and Habibah have a special interest in palindromic numbers. Determine, for them, the probability that a five-digit integer greater than or equal to 10 000 is a palindrome.

