



## Problem of the Week Problem C

### A Powerful Problem For The New Year

$5^3$  is a *power* with *base* 5 and *exponent* 3.

$5^3$  means  $5 \times 5 \times 5$  and equals 125 when expressed as an integer.

When  $5^{2013}$  is expressed as an integer, what are the last three digits?

