What is the last digit of

$$2007^{2007^{2007}}.$$

Deadline for solution: 4/5/09.

Solution of the previous problem:

Prove that a six - digit number with the property that the first 3 digits are the same as the last 3 (and in the same order) is divisible by 13.

$$abcabc = abc \cdot 1001 = abc \cdot 13 \cdot 77.$$