

UNDERGRADUATE PROBLEM SOLVING CONTEST

PROBLEM 2

DUE NOVEMBER 27, 2012

Find all integers  $x$  such that  $x^4 + x^3 + x^2 + x + 1$  is a perfect square.

In the spirit of UPSC, you should not use the internet or look up the solution in a book. Please include your name, student ID number and email address on your solution.