

PROBLEM OF THE WEEK - FALL 2014 - WEEK OF OCTOBER 20TH

QUESTION 1

If a, b , and c are positive odd integers show that the polynomial $p(x) = ax^2 + bx + c$ does not have rational roots. By this we mean if $p(z) = 0$ then z cannot be written as $z = \frac{p}{q}$ where p and q are integers.