

Cal Poly Department of Mathematics

Puzzle of the Week

Oct 22-Nov 4, 2015

From Tom O'Neil:

Find all *rational* triples (a, b, c) for which $a, b,$ and c are exactly all the roots of

$$x^3 + ax^2 + bx + c = 0.$$

Solutions should be submitted to Morgan Sherman:

*Dept. of Mathematics, Cal Poly
Email: sherman1 -AT- calpoly.edu
Office: bldg 25 room 329*

before the due date above. Those with correct and complete solutions will have their names listed on the puzzle's web site (see below) as well as in the next email announcement. Anybody associated to Cal Poly is welcome to make a submission.

<http://www.calpoly.edu/~sherman1/puzzleoftheweek>