

## SOME GENERALIZATIONS OF PROBLEM no. 23521, C.M. 4/1996

Abstract. This note gives some generalizations of a problem published in "Gazeta Matematică": If  $x, y, z$  are three nonzero complex numbers such that  $x+y+z=0$  and  $\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = 0$ , it is requested to calculate  $x^{2n} + y^{2n} + z^{2n}$ , where  $n$  is a natural number non multiple of 3. (I. Cucurezeanu)

The reader is invited to make further generalizations of other interesting problems published in "Gazeta Matematică" or elsewhere, as an exercise for stimulating a creative spirit.

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