Problema 1 (Grécia TST 2016, 2). Given is a triangle with inscribed in circle Let D, E, Z be the midpoints of BC, CA, AB respectively,and K the foot of the altitude from At the exterior of $\triangle ABC$ and with the sides AB, AC as diameters,we construct the semicircles c_1, c_2 respectively.Suppose that $P \equiv DZ \cap c_1$, $S \equiv KZ \cap c_1$ and Finally,let M be the intersection of the lines

i. Prove that the lines PR, ST intersect at

ii. Prove that the lines $PR \cap MD$ intersect on