

ZMATH 2009b.00346

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The sum of the distances to the sides of a triangle. (De som van de afstanden tot de zijden van een driehoek.)

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Summary: The author states that a teacher should, from time to time, solve a new problem in order to stay 'fit' mathematically and to feel what pupils feel when they are confronted with an new problem. He tells about a beautiful problem he recently tried to solve: "what is the locus of the points such that the sum of the distances to the sides of a given triangle is a fixed number?" The author found a solution using three dimensional space, and this helped him to find a simpler, plane solution.

Classification: G40

Keywords: triangle geometry; problem-solving strategies; plane geometry; geometry in three dimensions; geometric loci