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Comments on the remaining velocity project with reports of school-experiments.

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Summary: The aim of this article is to introduce different possible solutions to the exercise referring to the calculation of “remaining velocity”. We explain the possible approaches to the problem with the help of either using the tools of mathematics or other subjects. During the past few years, we have made Hungarian and Slovakian secondary school students solve the exercise, choosing from both children of average and of high abilities. The experience has shown that very few students were able to solve the problem by themselves, but with the help of their teachers, the exercise and the solution has been an eye-opener experience to all of them. A lot of students were even considering to drive more carefully in the future after getting their driving licenses.

Classification: M54 D54 U34 M74

Keywords: mathematical modeling; interdisciplinarity; realistic problem solving; mathematics and social behavior; graphical solutions; mechanical problems; speeding; GeoGebra; DQME project; international comparative school experiments