Physics Seminar

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Marconi Building, N115, 13:30

Title: Crocodile stalking zebra prey: The Scottish 2015 A-level controversial maths problem. Solutions, comments and reflections

Abstract

There has been wide-spread criticism of higher-level maths problem given as part of the 2015 Scottish A-level maths examination. There has been an equally large amount of comments pointing to all the technical and examinatorial deficiencies of this short problem. In spite of this turmoil, based largely on the students outcry reaction to the problem and the readjustement of the marking scheme by the Examiners, there has been little time devoted to discussing the solutions.

As it is formulated, the problem should be considered a physics problem rather than a maths one, for it is strictly a problem of kinematics. I believe that this distinction is very important and in many ways the crux of all the uproar and confusion. This is a physics problem that the student is asked to solve as a pure math problem, i.e. without resorting to physical intuition. I solve the problem from both the maths viewpoint -as was expected from the student taking the examination- and the physics viewpoint, and contrast the two approaches.