



STEP III, 2012 Q10 EC

10. This was the most popular of the non-Pure questions, being attempted by about a sixth of candidates, and with more success than all but three questions on the paper. Many attempts failed to include a clear, legible, accurate diagram, and so an unclear mess of variables invariably failed to lead to satisfactory conclusions. On the other hand, the general standard of mechanics was above average, and the initial energy equation was usually correct. Many candidates came to grief with the general energy equation, confusing signs. A good number of strong candidates ploughed straight through correctly, and all who did so, then gained credit at the end for using the discriminant to demonstrate that R is non-zero.



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