

STEP III, 2012 Q1 EC

1. In spite of the printing error at the start of the question, two thirds of the candidates attempted this question. Most candidates earned a quarter of the marks by obtaining z in terms of y in part (i), and then went no further. Some candidates realised the significance of the first line of the question that the expression given was an exact differential, and those that did frequently then scored highly. Some candidates found their own way through having obtained z in terms of y in part (i), then making y the subject substituted back to find a second order differential equation for z , which they then solved and hence completed the solution to each part.



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