



## STEP III, 2011 Q4 EC

4. About two thirds of the candidates tried this, with very slightly greater success than questions 2 and 3. They found part (i) tricky, especially understanding the integral of the inverse function. Also, commonly, they thought the condition was that  $b = a$ . However, part (ii) was done better, most errors being due to taking the inverse incorrectly, and of course, the verification frequently went wrong due to the false condition. Most realised the function to use in part (iii) but there was plenty of inaccuracy in working this part, though the final deduction caused few worries.



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