

STEP II, 2015, Q6 EC

Question 6

This was the most popular question on the paper with over 1000 attempts made. The first section did not present significant difficulties to candidates and the integration was generally well completed, although occasionally with an error in the factor. The second part proved difficult for a number of candidates who failed to change the variable in the integral correctly, or in some cases did not change the variable in every position that it occurred. Other candidates did not apply a correct result for dealing with the trigonometric functions involved or did not clearly show how the required result was reached as the solution jumped through several steps to a statement of the result asked for in the question. There were very few successful attempts at the final part of the question, but they did include a variety of methods for evaluating the integral once the substitution had been made.



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