

STEP III, 2016 , Q6 EC

Question 6

Just under 40% attempted this question, and did so without great success, scoring about one-third marks. The majority knew the formula for cosh of a sum, or if not, could use definitions and compare coefficients to obtain the first result in the stem. However, they were very weak on the $A = B$ case.

Explanation for part (i) was poor, and the plus or minus was frequently not properly understood; as a consequence, a specious plus or minus often appeared in part (ii). Arguing necessary and sufficient conditions in (iii) and (iv) was weak. However, a small number of good candidates did complete this question.



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