

STEP II, 2008, Q2 EC

Q2 Noticeably less popular than Q1 – with only around 500 “hits” – and with a very much poorer mean mark of about 8, it was rather obvious that many candidates were very unsure as to what constituted the *best* partial fraction form for the given algebraic fraction to begin with. Then, with very little direct guidance being given in the question, candidates’ confidence seemed to ebb visibly as they proceeded, being required to turn the resulting collection of single algebraic fractions into series, using the *Binomial Theorem*, and then into a consideration of general terms. There was much fudging of these general terms in order to get the given answers of either $n + 1$ or $n + 2$ for the general term’s coefficients; even amongst those who did spot which one occurred when, there was often little visible justification to support the conclusions. As a result of all the hurdles to be cleared, those who managed to get to the numerical ending successfully were very few in number.



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