

STEP II, 2018, Q1 EC

This was the most popular question of the paper, attempted by 93% of candidates. While many candidates scored well on this question there were very few who achieved full marks and a significant number who scored 0 for this question.

The first two parts of the questions were generally done well, with the majority of marks being lost for arithmetic errors or from just considering one of the two cases. In some cases, candidates produced the reasoning for part (ii) as their answer for part (i). In these cases, the candidates generally repeated the work as their answer for part (ii). There were a number of solutions to part (ii) that were overcomplicated, involving consideration of the factorised form and comparison of coefficients.

Part (iii) was also very well completed by those who attempted it, with the main cause for loss of marks being algebraic errors. A number of errors were seen in the final part of the question, particularly not considering the second case or not realising that the quadratic would have a different discriminant in this case and a failure to check that the roots of the quadratic did not duplicate the repeated root already found in this case.



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