

## STEP III, 2005, Q13 EC

- 13 This was the only Probability and Statistics question attempted by more than a handful of candidates, but was still only tackled by a small minority. In the first part, most could derive a correct expression for the probability that the player wins exactly  $\pounds r$ , but hardly any could either sum the series for the expectation or, alternatively, spot the connection with a Geometric random variable. Many did not then proceed to the second part, but those who did often found it more straightforward.



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