

## STEP II, 2009, Q3 EC

**Q3** Only marginally behind Q5 for popularity, this was a surprising hit amongst candidates. It had been anticipated that a trig. question containing lots of surds would be a bit of a turn-off, but this didn't prove to be the case. Moreover, it turned out to be the highest scoring question on the paper too. I had expressed reservations, during the setting process, that we had been a little too helpful in flagging up what was needed at each stage of the process, and so it proved to be. Most hiccups came at the outset, where proving even a simple identity such as this one was beyond many, even those who continued very successfully. The only other trouble-spot came in (ii) when lots of candidates (who should be applauded for trying to keep in the spirit of

“showing” stuff) undertook this part by rationalising the denominator (twice!) to prove the given result, while the sneakier types just multiplied across and verified it. Shame on them!



# NextStepMaths.com

To view mark schemes, fully worked solutions and examiner's comments, and for more details about tutoring and other services offered, go to [NextStepMaths.com](https://www.NextStepMaths.com)