



STEP III, 2007 Q4 EC

4. This question was quite popular. A lot of attempts involved rambling trigonometrical manipulations, and few spotted the standard differential of $\ln \tan \frac{t}{2}$. The curve sketch was often omitted or incorrect, and there was a lot of complicated working using e.g. the equation of the normal etc. to find the centre of curvature.



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