



## **STEP II, 2016, Q10 EC**

This question received a number of very good, and often concise, answers. However, there was a significant number of candidates who did not calculate the centre of mass, or mistakenly assumed that the formula for the centre of mass for an equilateral triangle could be applied. Many candidates chose to consider the limiting case first and then deduce the inequality in the final step, but did not justify the direction of the inequality clearly. There were a number of cases where the required angles were not calculated correctly when resolving the forces.



# **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)