1135-M5-1246 **Andrew J Simoson*** (ajsimoso@king.edu), Mathematics Department, King University, 1350 King College Road, Bristol, TN 37620, and **Andrew F Rich** (africh@manchester.edu), Manchester University, 604 E College Avenue, Manchester, IN 46962. *Conjunctions of runners on a circular track.*

Imagine three runners on a circular track of unit length at constant speeds of α, β, and γ. If they all start at point A on the track, when next will all runners be at point A? If α, β, and γ are rational numbers then the solution involves the least common multiple of their denominators. However what happens when they are irrational? Given a small positive number ϵ, we show how to apply Euclid's algorithm for the greatest common divisor of two integers to find a positive time (where all the runners have completed at least one lap) so that the runners are all within ϵ distance of A. (Received September 20, 2017)