MATHEMATICS ENRICHMENT CLUB.[1]
Solution Sheet 5, June 4, 2013

1. $\frac{504}{999}$

2. Let's call a "game state" the number of counters left at the start of a turn. A "winning

(b) If $AB = 2$, we must have two triangles whose only common side as side length 2, which are 2; 3; 4 and 2; 6; 5. These lengths must go along BC, AC, AD and BD so the remaining side CD must be length 8.

6. (a) Construct a semi-circle with diameter AB, centre O and point on the circumference C