

Week 40 (6/16/03)

**Staying ahead**

In a two-way election, candidate  $A$  receives  $a$  votes and candidate  $B$  receives  $b$  votes, with  $a > b$ . If the ballots are removed one at a time from the ballot box, and a running total of the score is kept, what is the probability that at all times  $A$ 's sub-total is greater than or equal to  $B$ 's sub-total?