Activity!

Let your sample space be all possible outcomes of a sequence of 100 coin tosses. Assign the uniform measure to this sample space.

What is the probability of the event, E, "there are exactly 50 heads"?

A. $\dfrac{\binom{100}{50}}{2^{100}}$

B. $\dfrac{1}{101}$

C. $\dfrac{1}{2}$

D. $\dfrac{1}{2^{50}}$

E. There is not enough information in this problem.