A Note on an American Mathematical Monthly Note

In the Feb. 2011 issue of the *American Mathematical Monthly*, pp. 175-177, there is a probabilistic proof (by G. Chang and C. Xu) of the identity $\sum_{i=0}^{n} \binom{2i}{i}\binom{2n-2i}{n-i} = 4^n$, and of a generalization. This, and the generalization, follow by extracting the coefficient of x^n in $((1-4x)^{-1/2})^2 = (1-4x)^{-1}$ and $((1-4x)^{-1/2})^m = (1-4x)^{-m/2}$ respectively. $\square$

Doron Zeilberger, `http://www.math.rutgers.edu/~zeilberg/`, Feb. 11, 2011. (`Exclusively published in` `http://www.math.rutgers.edu/~zeilberg/pj.html` `(Personal J. of S.B. Ekhad and D. Zeilberger) .`)