Magic Number for a Daily Compounded Interest Account

In Chapter 1, at the end of the section entitled "Compounding More Frequently", I promise to supply the formula for the magic number of a daily compounded account. You can find it on the Finance Calculator page at the top of the second form, under the words "Daily Compounded Interest". I also reproduce it here for your edification:

\[(1 + \frac{r}{365})^{n/365}\].

Here, \(r\) stands for the annual interest rate, and \(n\) is the number of years the lump sum deposited remains in the account.