Stata tip 4: Using display as an online calculator

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Do you use Stata for your data management, graphics, and statistical analysis but switch to a separate device for quick calculations? If so, you might consider the advantages of using Stata’s built-in display command:

1. It is always at hand on your computer.
2. As with all Stata calculations, double precision is used.
3. You can specify the format of results.
4. It uses and reinforces your grasp of Stata’s full set of built-in functions.
5. You can keep an audit trail of results and the operations that produced those results, as part of a log file. You can also add extra comments to the output.
6. Editing of complex expressions is easy, without having to re-enter lengthy expressions after a typo.
7. You can copy and paste results elsewhere whenever your platform supports that.
8. It is available via the menu interface (select Data—Other utilities—Hand calculator).
9. It can be abbreviated to di.

To be fair, there are some disadvantages, such as its lack of support for Reverse Polish Notation or complex number arithmetic, but in total, display provides you with a powerful but easy-to-use calculator.

. di _pi
  3.1415927
. di %12.10f _pi
  3.1415926536
  . * probability of 2 heads in 6 tosses of a fair coin
  . di comb(6,2) * 0.5^2 * 0.5^4
  . 234375
  . di "chi-square (1 df) cutting off 5% in upper tail is " invchi2tail(1, .05)
  . chi-square (1 df) cutting off 5% in upper tail is 3.8414588
  . * Euler-Mascheroni gamma
  . di %12.10f -digamma(1)
  . 0.5772156649

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