

## Commands

| Command            | Explanation                                    | Abbreviation |
|--------------------|--|--------------|
| set obs            | sets number of observations                    |              |
| set scheme slmono  | sets greyscale printer-friendly color scheme   |              |
| sort x             | sorts variable $x$ in ascending order          |              |
| line x y           | graphs a line plot of $x$ on $y$               |              |
| tsset y            | sets $y$ as the time variable in a time series |              |
| graph bar, over(x) | creates a bar graph for $x$                    |              |
| graph box x        | creates box plot for $x$                       |              |

## Examples

### Skew

|                                |   |
|--------------------------------|---|
| set obs 1000                   | sets observations to 1000                     |
| generate sdnorm = rnormal(0,1) | generates 100 $\mathcal{N}(0,1)$ observations |
| generate rskew = rbeta(1,6)    | generates a right skewed distribution         |
| generate lskew = rbeta(6,1)    | generates a left skewed distribution          |

### Kurtosis

|   |                                   |
|---|-----------------------------------|
| generate cauchy = rt(1)   | generates 100 Cauchy observations |
| tw kdensity cauchy, range(-5 5)    kdensity sdnorm, range(-5 5) |                                   |
| plots cauchy on top of standard normal from $-5$ to $5$ .       |                                   |

### Time Series

Open *bees.dta* from my website.

|  |  |
|--|--|
| line cols year                             | plots time series of bee colonies over years |
| tsset year                                 | sets <i>year</i> as the time variable        |
| graph twoway tsline cols                   | plots the time series again                  |
| generate beechange = d.cols                | generates yearly change in bee cols          |
| generate beegrowth = 100 * d.cols / l.cols | generates growth rate of bee cols            |

### Graphs

Set 15 observations and input some random data called *var*.

|  |                                 |
|--|---------------------------------|
| graph bar, over(var, sort(1) descending) | sorts bars in descending height |
|--|---------------------------------|