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| lines {graphics} | R Documentation |

**Add Connected Line Segments to a Plot**

**Description**

A generic function taking coordinates given in various ways and joining the corresponding points with line segments.

**Usage**

lines(x, ...)

## Default S3 method:

lines(x, y = NULL, type = "l", ...)

**Arguments**

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| x, y | coordinate vectors of points to join. |
| type | character indicating the type of plotting; actually any of the types as in [plot.default](http://127.0.0.1:14695/library/graphics/help/plot.default). |
| ... | Further graphical parameters (see [par](http://127.0.0.1:14695/library/graphics/help/par)) may also be supplied as arguments, particularly, line type, lty, line width, lwd, color, col and for type = "b", pch. Also the line characteristics lend, ljoin and lmitre. |

**Details**

The coordinates can be passed in a plotting structure (a list with x and y components), a two-column matrix, a time series, .... See [xy.coords](http://127.0.0.1:14695/library/graphics/help/xy.coords). If supplied separately, they must be of the same length.

The coordinates can contain NA values. If a point contains NA in either its x or y value, it is omitted from the plot, and lines are not drawn to or from such points. Thus missing values can be used to achieve breaks in lines.

For type = "h", col can be a vector and will be recycled as needed.

lwd can be a vector: its first element will apply to lines but the whole vector to symbols (recycled as necessary).

**References**

Becker, R. A., Chambers, J. M. and Wilks, A. R. (1988) *The New S Language*. Wadsworth & Brooks/Cole.

**See Also**

[lines.formula](http://127.0.0.1:14695/library/graphics/help/lines.formula) for the formula method; [points](http://127.0.0.1:14695/library/graphics/help/points), particularly for type %in% c("p","b","o"), [plot](http://127.0.0.1:14695/library/graphics/help/plot), and the workhorse function [plot.xy](http://127.0.0.1:14695/library/graphics/help/plot.xy).

[abline](http://127.0.0.1:14695/library/graphics/help/abline) for drawing (single) straight lines.

[par](http://127.0.0.1:14695/library/graphics/help/par) for line type (lty) specification and how to specify colors.

**Examples**

# draw a smooth line through a scatter plot

plot(cars, main = "Stopping Distance versus Speed")

lines(stats::lowess(cars))