How grid Responds to Non-Finite Values

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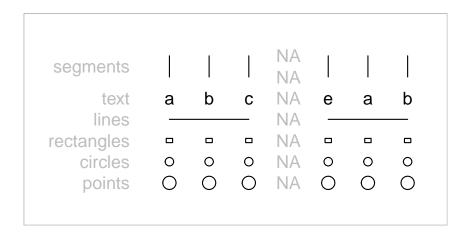
It is possible to include non- nite values, NA, NaN, Inf, and -Inf, in speci cations of locations and sizes in **grid** functions. This document describes how **grid** responds to non- nite values in di erent cases.

viewports

Non- nite values are not permitted in the location, size, or scales of a viewport. Viewport scales are checked when a viewport is created. It is very hard to be certain that locations and sizes are not non- nite when the viewport is created so this is only checked when the viewport is pushed. Non- nite values result in error messages.

lines, segments, rectangles, text, points, circles

For all of these primitives, non- nite values for locations or sizes result in the corresponding primitive not being drawn. The following image provides a simple demonstration. Each primitive is drawn at seven x-locations, with the fourth location made non- nite (as indicated by a grey "NA").



lineTo

A line segment is only drawn if the previous location and the new location are both not non- nite.

polygon

A non- nite value breaks the polygon into two separate polygons. NOTE that this break happens within the current polygon as specified by the id argument. All polygons with the same id receive the same gp settings.

arrows

An arrow head is only drawn if the rst or last line segment is drawn.

The following image demonstrates the behaviour of these primitives where x- and y-locations are seven equally-spaced locations around the perimeter of a circle. In the top-left gure, all locations are not non- nite. In each of the other gures, two locations have been made non- nite (indicated in each case by grey text).

