

Package ‘UnitCircle’

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Type Package

Title Check if Roots of a Polynomial Lie Outside the Unit Circle

Version 0.1.3

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Description The `uc.check()` function checks whether the roots of a given polynomial lie outside the Unit circle. You can also easily draw an unit circle.

License GPL-3

Encoding UTF-8

RoxygenNote 6.0.1

URL <https://github.com/BerriJ/UnitCircle>

BugReports <https://github.com/BerriJ/UnitCircle/issues>

NeedsCompilation no

Repository CRAN

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<code>uc.check</code>	<i>Check if Roots of a Polynomial Lie Outside the Unit Circle</i>
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Description

This function outputs the roots of a given polynomial. It also checks whether they lie outside the unit circle and creates a plot to illustrate the results in an intuitive way.

Usage

```
uc.check(pol_, plot_output = T, print_output = T)
```

Arguments

<code>pol_</code>	the vector of polynomial coefficients in increasing order.
<code>plot_output</code>	Logical that defines whether to create a plot.
<code>print_output</code>	Logical that defines whether to print the results.

Examples

```
uc.check(pol_ = c(1,0,0.999999999), plot_output = FALSE)  
  
uc.check(pol_ = c(2,0,2.2,-3), plot_output = TRUE)
```

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