

Package ‘conditionalProbNspades’

May 8, 2026

Version 1.0

Date 2024-09-30

Title Conditional Probabilities of Distributions Across Hearts Hands

Maintainer Barry Zeeberg <barryz2013@gmail.com>

Depends R (>= 4.2.0)

Description Provides some tabulated data to be referred to in a discussion in a vignette accompanying my upcoming R package 'playWholeHandDriverPassParams'. In addition to that specific purpose, these may also provide data and illustrate some computational approaches that are relevant to card games like hearts or bridge. This package refers to authentic data from Gregory Stoll <<https://gregstoll.com/~gregstoll/bridge/math.html>>, and details of performing the probability calculations from Jeremy L. Martin <<https://jlmartin.ku.edu/~jlmartin/bridge/basics.pdf>>.

License GPL (>= 2)

Encoding UTF-8

VignetteBuilder knitr

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

RoxygenNote 7.3.1

Config/testthat/edition 3

NeedsCompilation no

Author Barry Zeeberg [aut, cre]

Repository CRAN

Date/Publication 2024-10-03 19:20:08 UTC

Contents

conditionalProbNspades	2
conditionalProbNspadesDriver	2
cumulativeConditionalProbNspades	3
Index	4

conditionalProbNspades

conditionalProbNspades

Description

computes an array of probabilities of number of spades in an opponent's (unknown) hand conditioned on the number of spades in my (known) hand

Usage

conditionalProbNspades(N)

Arguments

N N is the number of spades in my hand

Value

returns an array of probabilities of number of spades in an opponent's (unknown) hand conditioned on the number of spades in my (known) hand

Author(s)

Barry Zeeberg

Examples

```
x<-conditionalProbNspades(4)
```

conditionalProbNspadesDriver

conditionalProbNspadesDriver

Description

driver to invoke conditionalProbNspades

Usage

conditionalProbNspadesDriver()

Value

returns a matrix of conditional probabilities

Author(s)

Barry Zeeberg

Examples

```
x<-conditionalProbNspadesDriver()
```

```
cumulativeConditionalProbNspades  
      cumulativeConditionalProbNspades
```

Description

compute cumulative probabilities from the matrix of conditional probabilities

Usage

```
cumulativeConditionalProbNspades()
```

Value

returns no value but has side effect of printing tables of cumulative probabilities

Author(s)

Barry Zeeberg

Examples

```
x<-cumulativeConditionalProbNspades()
```

Index

`conditionalProbNspades`, [2](#)
`conditionalProbNspadesDriver`, [2](#)
`cumulativeConditionalProbNspades`, [3](#)