

Package ‘pareto’

February 6, 2017

Type Package

Title Density Function for Pareto Distribution

Version 1.0-1

Date 2017-02-04

Author Yiheng Liu

Maintainer Yiheng Liu <yiheng-liu@uiowa.edu>

Description

Density function for the pareto distribution with scale equal to alpha and shape equal to beta.

License GPL (>=2)

NeedsCompilation no

R topics documented:

dpareto 1

Index 3

dpareto	<i>The Pareto Distribution</i>
---------	--------------------------------

Description

Density function for the pareto distribution with scale equal to alpha and shape equal to beta.

Usage

```
dpareto(x, alpha, beta, log = FALSE)
```

Arguments

x	vector of quantiles.
alpha	scale parameters. Must be positive.
beta	shape parameters. Must be positive.
log	logical; if TRUE, probabilities p are given as log(p).

Details

The pareto distribution has density

$$f(x) = \frac{\beta \alpha^\beta}{x^{\beta+1}}$$

where $0 < \alpha < x$ and $\beta > 0$.

Value

dpareto gives the density.

Invalid arguments will result in return value NaN, with a warning.

The length of the result is the maximum of the lengths of the numerical arguments.

The numerical arguments are recycled to the length of the result. Only the first element of the logical argument is used.

Author(s)

Yiheng Liu

Examples

```
dpareto(4, 2, 1)
dpareto(1:5, 2, 1)
dpareto(1:5, 2, 1, log = TRUE)
```

Index

*Topic **distribution**

dpareto, [1](#)

dpareto, [1](#)