riemann

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ABSTRACT

A package to draw Riemann sums (and their plots) of a function with CeTZ.

Riemann

- riemann()

riemann

Draw a Riemann sum of a function, and optionally plot the function.

Parameters

riemann(
  fn: `function`,
  start: `number`,
  end: `number`,
  n: `number`,
  y-scale: `number`,
  x-offset: `number`,
  y-offset: `number`,
  hand: `string`,
  transparency: `number`,
  dot-radius: `number`,
  plot: `boolean`,
  plot-grid: `boolean`,
  plot-x-tick-step: `number`,
  plot-y-tick-step: `number`,
  positive-color: `color`,
  negative-color: `color`,
  plot-line-color: `color`
)

fn   `function`

The function to draw a Riemann sum of.

start   `number`

Where to start drawing bars.

Default: `0`

end   `number`

Where to end drawing bars.

Default: `10`

n   `number`

Number of bars (please make Delta x = 1).

Default: `10`

y-scale   `number`

Y scale of bars.

Default: `1`

x-offset   `number`

X offset of bars.

Default: `0`

y-offset   `number`

Y offset of bars.

Default: `0`

hand   `string`

Where points are derrived from. Can be "left", "mid"/"midpoint", or "right".

Default: `"left"`

transparency   `number`

Transparency fill of bars.

Default: `40%`

dot-radius   `number`

Radius of dots.

Default: `0.055`

plot   `boolean`

Whether to add plot of the function.

Default: `true`

plot-grid `boolean`

Show grid on plot.

Default: `false`

plot-x-tick-step `number`

X tick step of plot.

Default: `auto`

plot-y-tick-step `number`

Y tick step of plot.

Default: `auto`

positive-color `color`

Color of positive bars.

Default: `color.green`

negative-color `color`

Color of negative bars.

Default: `color.red`

plot-line-color `color`

Color of plotted line.

Default: `color.blue`