CeTZ Venn 0.1.1

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## 1 Introduction

CeTZ Venn is a tiny package for drawing two- and three-set Venn diagrams using Typst and CeTZ.

CeTZ version  $\geq$  0.2.2 is required!

## 2 Examples

A simple two set Venn diagram:

```
cetz.canvas({
  cetz-venn.venn2(
    name: "venn",
    a-fill: gray,
    ab-fill: gray,
)

import cetz.draw: *
  content("venn.ab", [AB])
})
```

A three set diagram with arrows:

```
cetz.canvas({
    cetz-venn.venn3(
    name: "venn",
    a-fill: gray,
    b-fill: gray,
    abc-fill: gray,
}

import cetz.draw: *
    content("venn.c", [C])

line("venn.abc", (rel: (2.2,-2.5)), mark: (start: "o", fill: black),
    name: "arrow")
    content("arrow.end", [Here], anchor: "north", padding: .1)
})
```

# 3 Styling

All diagrams use the style root venn and accept the following style keys:

fill: fill Default: "white"

The default fill for all elements

stroke: stroke Default: auto

The default stroke for all elements

padding: number Default: 2em

Padding of the outer (rect) element

## 4 Functions

#### 4.1.1 venn2

Draw a venn diagram with two sets a and b

#### **Set attributes:**

The venn2 function has two sets a and b, each of them having the following attributes:

- \*-fill: Fill color
- \*-stroke: Stroke style

To set a set-attribute, combine the set name (a) and the attribute key (fill) with a dash: a-fill.

```
cetz.canvas({
  cetz-venn.venn2(a-fill: red, b-fill: green)
})
```

The following set names exist and also act as anchors (for labels):

- a
- b
- ab
- not-ab

#### **Parameters**

```
venn2(
    ..args: any,
    name: none string
)
```

..args: any

Set attributes

name: none or string

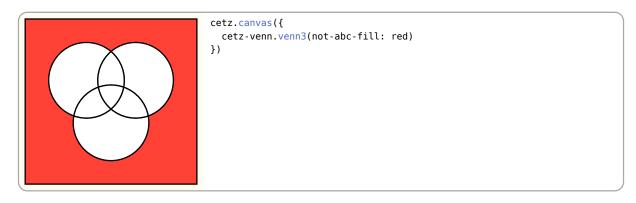
Default: none

Element name

### 4.1.2 venn3

Draw a venn diagram with three sets a, b and c

See venn2 for the attribute documentation.



The following set names exist and also act as anchors (for labels):

- a
- b
- C
- ab
- bc
- ac

Default: .5

Default: none

```
• abc
```

• not-abc

### **Parameters**

```
venn3(
    ..args: any,
    padding,
    name: none string
)
..args: any
```

Set attributes

padding:

name: none or string

Element name