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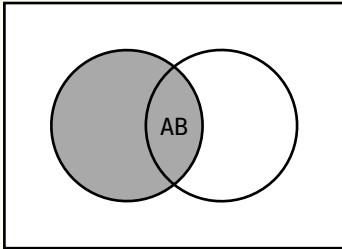
## 1 Introduction

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

**CeTZ version  $\geq 0.3.1$  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` or `dictionary` Default: `2em`

Padding of the outer (rect) element. Per side padding can be specified by passing a dictionary with one or more of the following keys: `top`, `bottom`, `left`, `right` and `rest`, where `rest` acts as a fallback for unset values.

## 4 Functions

### 4.0.1 `venn2`

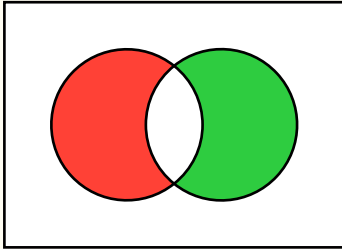
Draw a venn diagram with two sets `a` and `b`

#### Set attributes:

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

- `*-fill`: Fill color
- `*-stroke`: Stroke style
- `*-layer`: CeTZ layer index

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 and style attributes

**name:** none or string

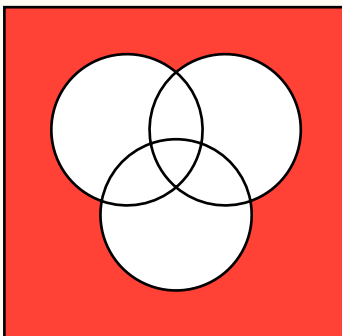
Element name

Default: none

### 4.0.2 venn3

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

See `venn2` for the attribute documentation.



```
cetz.canvas({
  cetz-venn.venn3(not-abc-fill: red)
})
```

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

- a
- b

- c
- ab
- bc
- ac
- abc
- not-abc

### Parameters

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

**..args:** any

Set attributes

**name:** none or string

Element name

Default: none