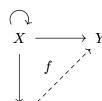
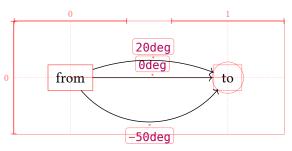
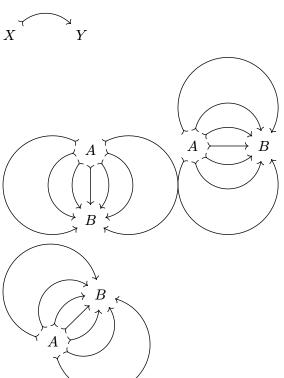
### **Connectors**



### **Arc connectors**

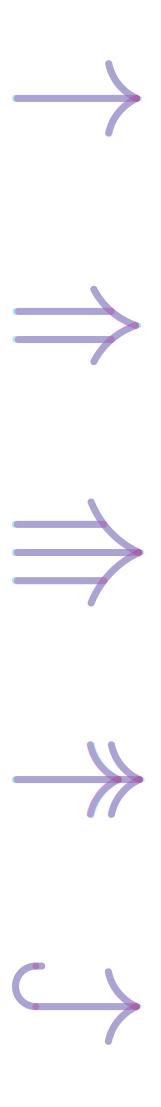


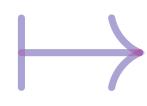


# Matching math arrows

Compare to  $\rightarrow$ ,  $\Rightarrow$   $\Rightarrow$   $\rightarrow$ ,  $\hookrightarrow$ ,  $\mapsto$ .

Compare our output to the reference symbol in default math font.





## Double and triple lines

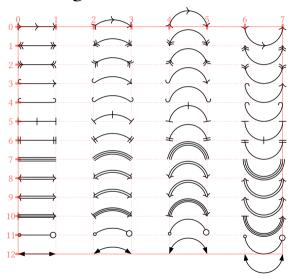
Diagram  $A \xrightarrow{f} B$  and equation  $A \to B$ .

Diagram  $A \xrightarrow{f} B$  and equation  $A \Rightarrow B$ .

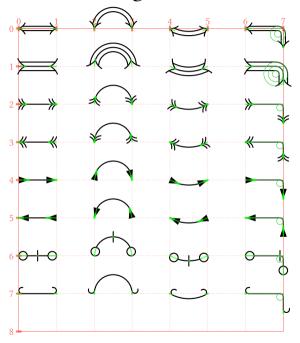
Diagram  $A \Longrightarrow^f B$  and equation  $A \Rightarrow B$ .

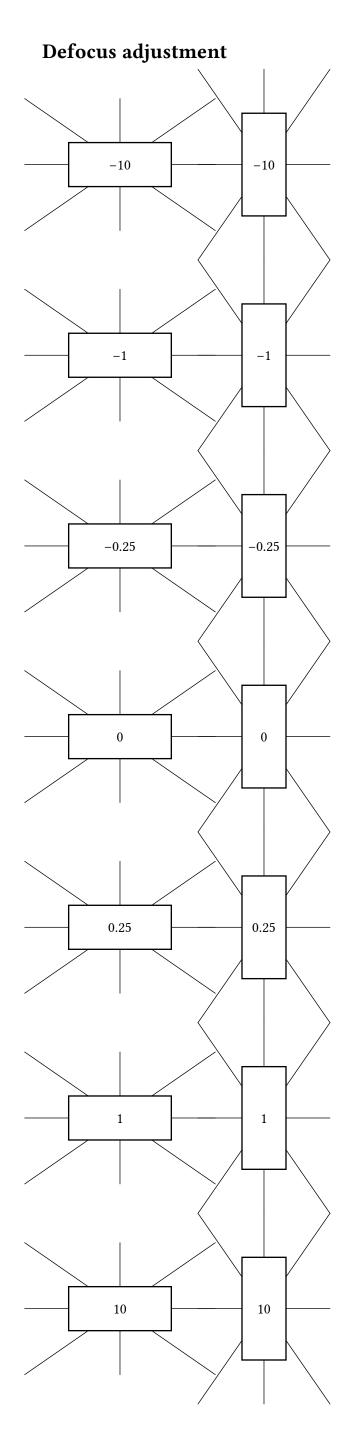
### Arrow head shorthands

# Bending arrows

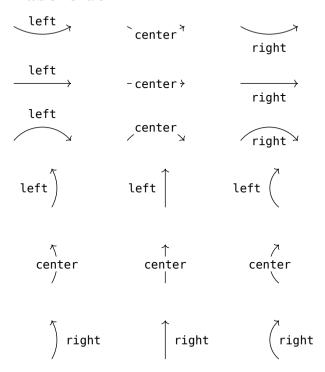


# Fine mark angle corrections



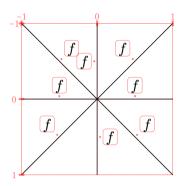


#### Label side

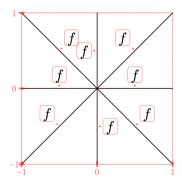


# Automatic label placement

Default placement above the line.



#### Reversed *y*-axis:



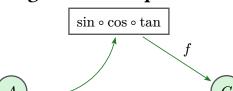
# **Crossing connectors**



## edge() argument shorthands



# **Diagram-level options**



 $\nu$ 

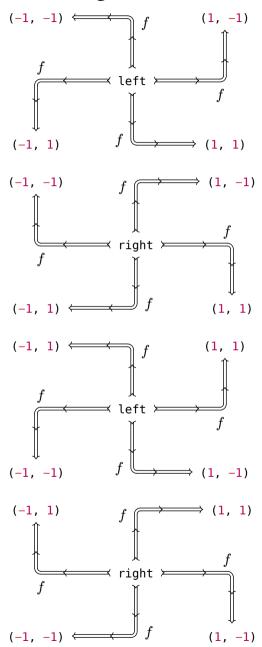
# **CeTZ** integration

TODO!

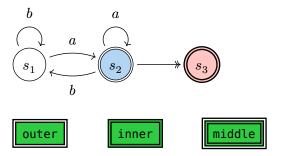
Bézier



## Corner edges



#### Double node strokes

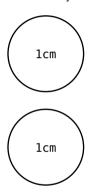


Relative and absolute extrusion lengths



#### Custom node sizes

Make sure provided dimensions are exact, not affected by node inset.



width

height

b<mark>ot</mark>h

### Node inset and outset

What 5mm inset should look like:



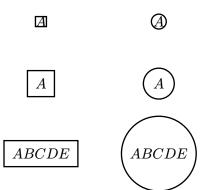
A diagram node with 5mm inset:



A diagram node with 5mm outset:

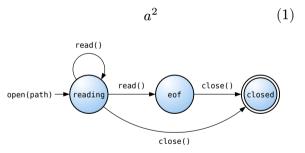


Circular insets:



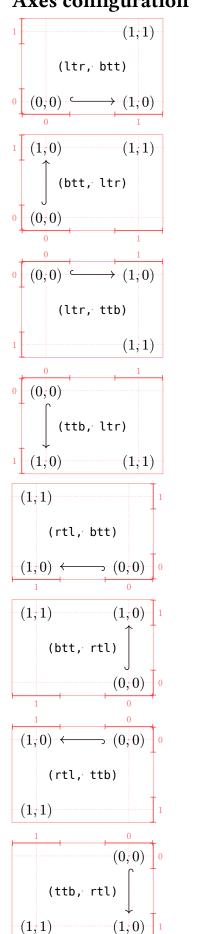
### Example

Make sure node or edge labels don't pick up equation numbers!

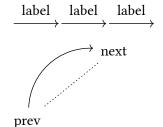


$$b^2 (2)$$

# Axes configuration



## Implicit from and to points



### Edge positional arguments

Explicit named arguments versus implicit positional arguments.

Each row should be the same thing repeated.

$$A \longrightarrow B \quad A \longrightarrow B \quad A \longrightarrow B$$

$$A \stackrel{\pi}{\longrightarrow} B \quad A \stackrel{\pi}{\longrightarrow} B \quad A \stackrel{\pi}{\longrightarrow} B$$

$$A \stackrel{\tau}{\longmapsto} B \quad A \stackrel{\tau}{\longmapsto} B \quad A \stackrel{\tau}{\longmapsto} B$$

$$A \stackrel{+}{\longrightarrow} B \quad A \stackrel{+}{\longrightarrow} B \quad A \stackrel{+}{\longrightarrow} B$$

# Symbol arrow aliases

Math	Unicode	Mark	Diagram
$\rightarrow$	$\rightarrow$	->	$\stackrel{-}{\longrightarrow}$
$\longrightarrow$	?	->	$\longrightarrow$
$\leftarrow$	<b>←</b>	<-	<del></del>
$\leftrightarrow$	$\leftrightarrow$	<->	$\longleftrightarrow$
$\longleftrightarrow$	?	<->	$\longleftrightarrow$
<b>→</b>	?	->>	
<b>«</b>	?	<<-	*
$\rightarrow$	?	>->	$\longrightarrow$
$\leftarrow$	?	<-<	$\leftarrow$
$\Rightarrow$	$\Rightarrow$	=>	$\Longrightarrow$
$\Rightarrow$	?	=>	$\Longrightarrow$
<b>(</b>	?	<=	<del></del>
$\Leftrightarrow$	$\Leftrightarrow$	<=>	$\longleftrightarrow$
$\iff$	?	<=>	$\longleftrightarrow$
$\mapsto$	$\mapsto$	->	$\longmapsto$
$\Rightarrow$	?	=>	$\Longrightarrow$
৵	?	none!	none!
₩	?	none!	none!
$\hookrightarrow$		hook->	$\hookrightarrow$
$\leftarrow$		<-hook'	← →

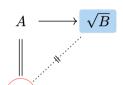
### Math-mode diagrams

The following diagrams should be identical:

$$G \xrightarrow{f} \operatorname{im}(f)$$

$$\pi \downarrow \qquad \tilde{f} \qquad \tilde{f}$$

#### Nodes in math-mode

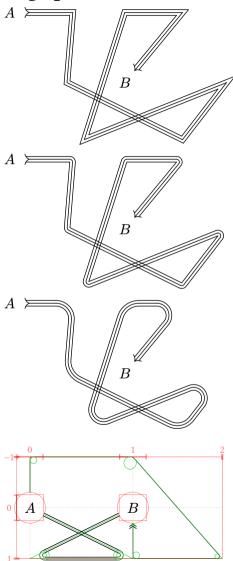


#### Relative node coordinates

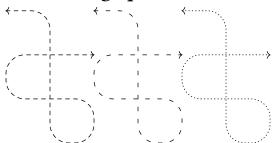
$$G \xrightarrow{f} \operatorname{im}(f)$$

$$\pi \downarrow \qquad \tilde{f} \qquad \tilde{f}$$

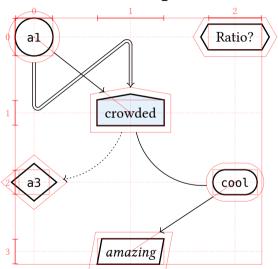
# Edge paths



# Dashed edge paths



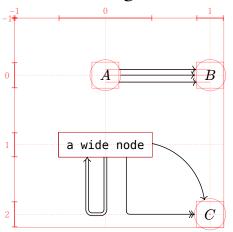
# Custom node shapes



## **Intersection finding**



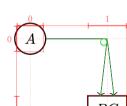
# Off-center edges



## Edge shift TODO!







### Label fill

