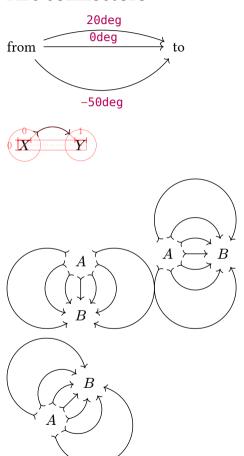
#### **Connectors**



### **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

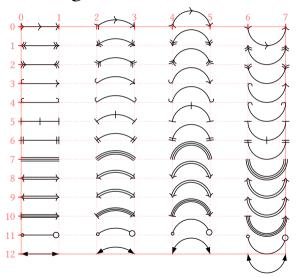
Diagram  $A \xrightarrow{f} B$  and equation  $A \to B$ .

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

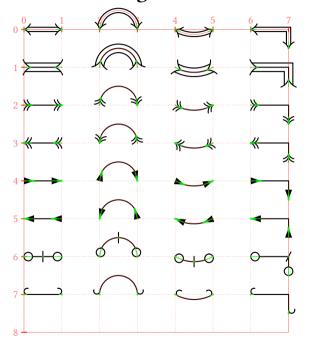
Diagram  $A \stackrel{f}{\Longrightarrow} B$  and equation  $A \Rightarrow B$ .

### Arrow head shorthands

## Bending arrows

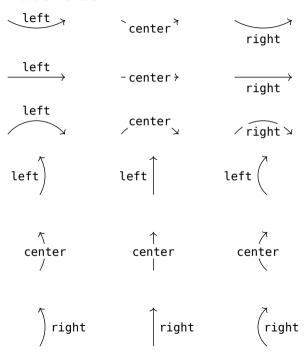


# Fine mark angle corrections



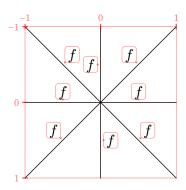


#### Label side

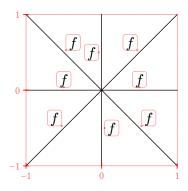


### Automatic label placement

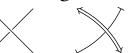
Default placement above the line.



#### Reversed y-axis:



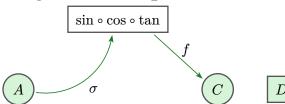
# **Crossing connectors**



# edge() argument shorthands



## **Diagram-level options**



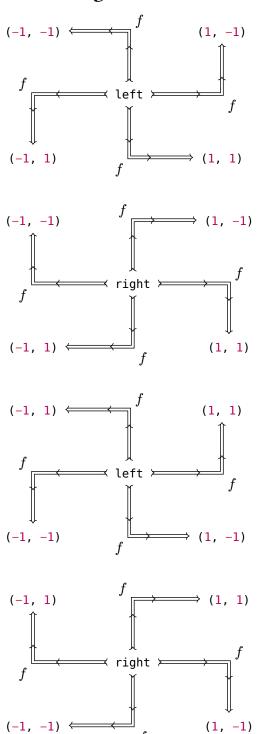
## **CeTZ** integration



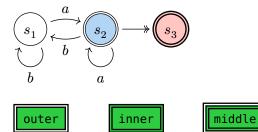
## Node bounds, inset, and outset

```
\begin{array}{c}
0 \\
0 \\
\text{hello} \iff \text{there}
\end{array}
```

### Corner edges



#### Double node strokes

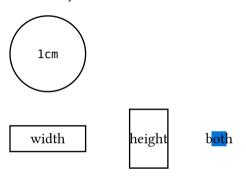


Relative and absolute extrusion lengths



#### Custom node sizes

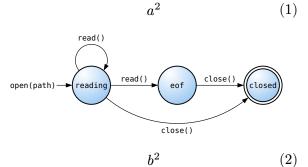
Make sure provided dimensions are exact, not affected by node inset.



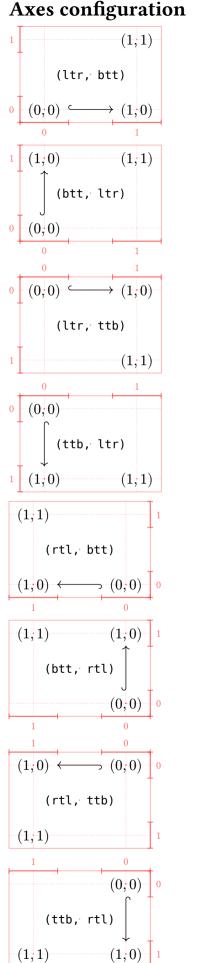


### **Example**

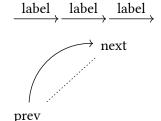
Make sure node or edge labels don't pick up equation numbers!



# 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.

# 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:

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

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

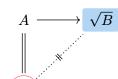
$$G/\ker(f)$$

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

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

$$G/\ker(f)$$

#### Nodes in math-mode



#### Relative node coordinates

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

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

$$G/\ker(f)$$

$$(0,0) \qquad (1,0) \qquad (0,0) \qquad (1,0)$$

$$\uparrow \qquad \qquad \uparrow \qquad \qquad \downarrow$$

$$(0,1) \qquad (1,1) \qquad (0,1) \qquad (1,1)$$

# **Edge paths**

