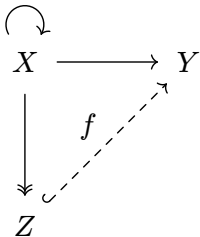
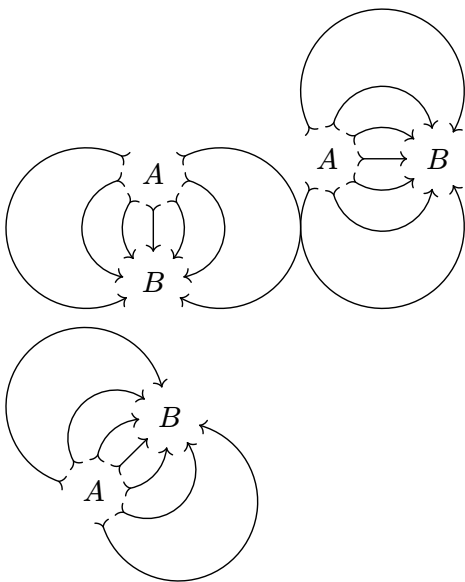
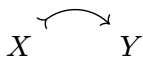
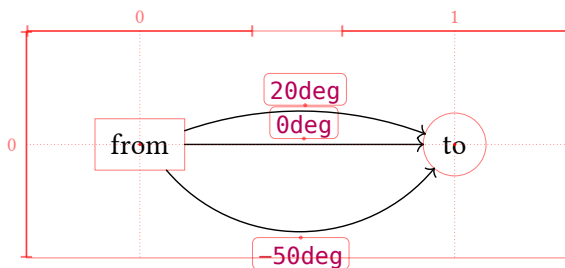


# Connectors



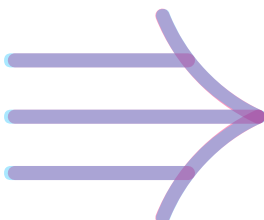
# Arc connectors



# Matching math arrows

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

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



## Double and triple lines

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

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

Diagram  $A \xRightarrow{\quad f \quad} B$  and equation  $A \equiv B$ .

# Arrow head shorthands

"->" = 

"<-" = 

">-<" = 

"<->" = 

"<=>" = 

"<==>" = 

"|->" = 

"|=>" = 

">->" = 

"<<->>" = 

">>-<<" = 

">>>-}>" = 

"hook->" = 

"hook' - - hook" = 

"|=|" = 

"|||-||" = 

"||| - |||" = 

"/- - \\" = 

"\\ = \\" = 

"/=/" = 

"x-X" = 

">>-<<" = 

"harpoon-harpoon'" = 

"harpoon' -<<" = 

"<- - hook'" = 

"|. . |" = 

"hooks - - hooks" = 

"o-0" = 

"0-o" = 

"\*-@" = 

"o==0" = 

"||->>" = 

"<| - |>" = 

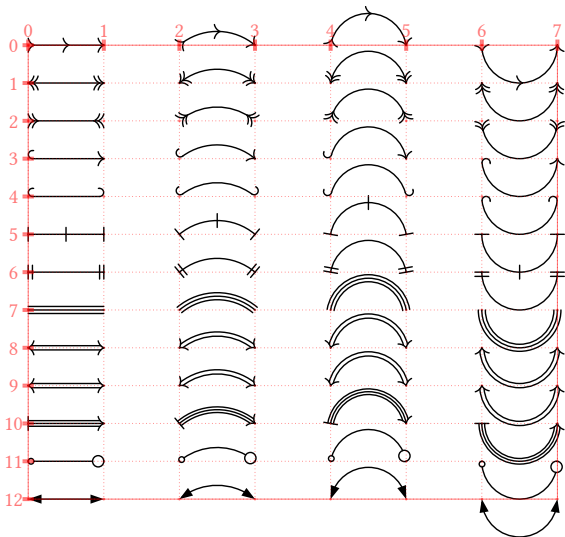
"|>-<|" = 

"-|- " = 

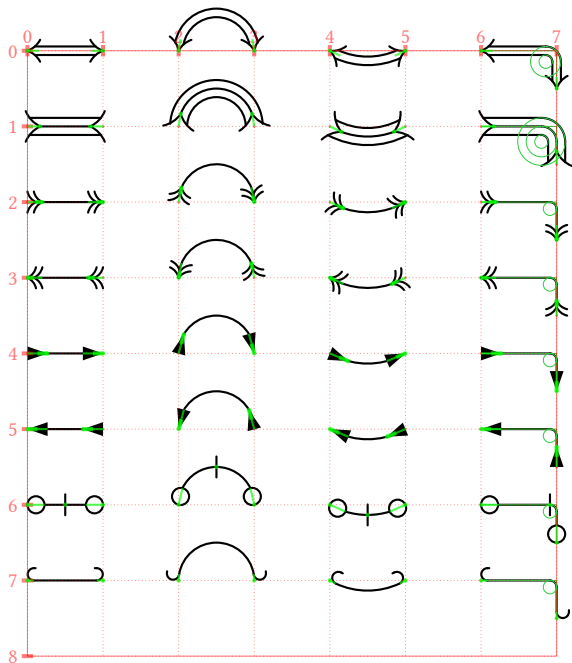
"hook-/->" = 

"<{-}>" = 

## Bending arrows



# Fine mark angle corrections

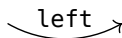


## Defocus adjustment





# Label side


left 

\center>

  
right

left 

-center>

  
right

left 

/center>

/right>

left 


left 

left 

  
center  


  
center  


  
center  

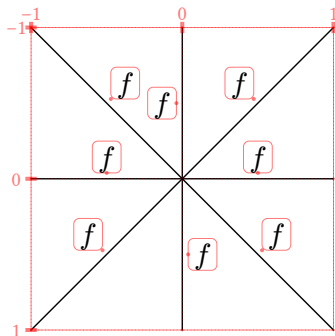

  
right

  
right

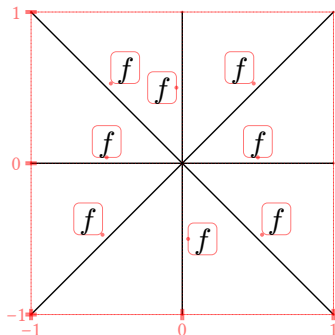
  
right

# Automatic label placement

Default placement above the line.



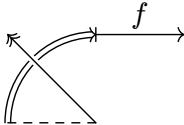
Reversed  $y$ -axis:



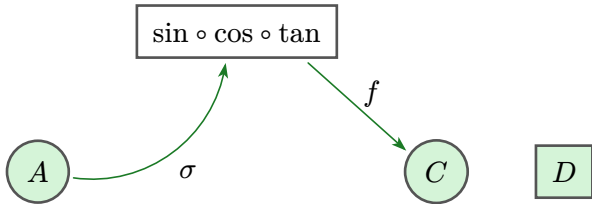
# Crossing connectors



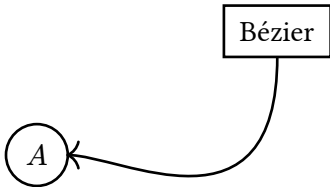
**edge( ) argument shorthands**



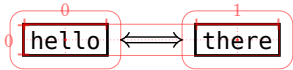
# Diagram-level options



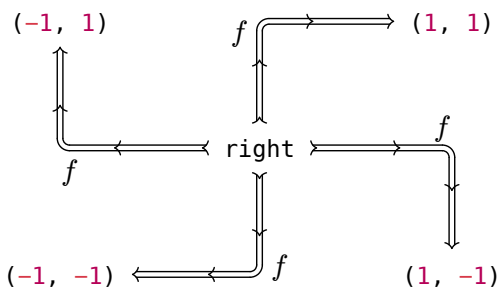
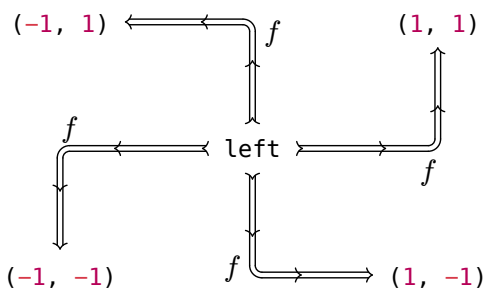
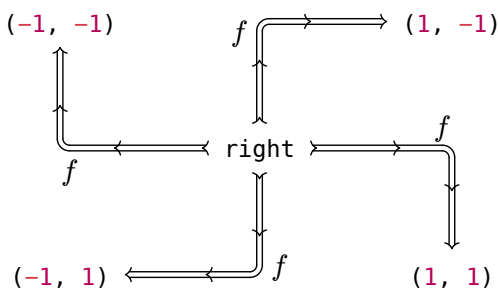
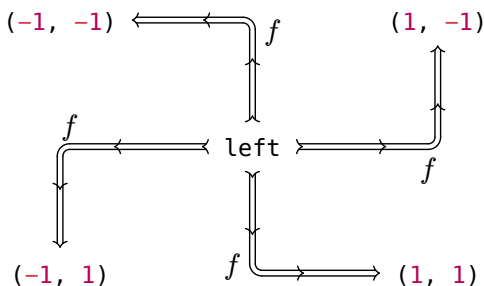
# CeTZ integration



# Node bounds, inset, and outset

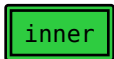
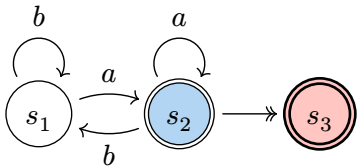


# Corner edges

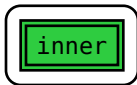
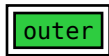




# Double node strokes



Relative and absolute extrusion lengths

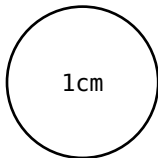


# Custom node sizes

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



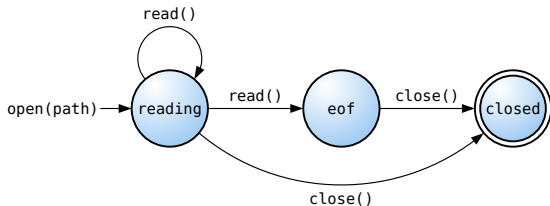
both



# Example

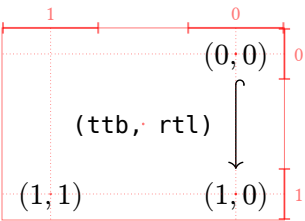
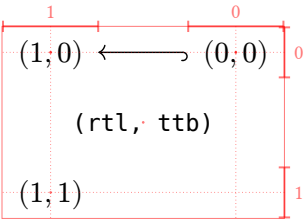
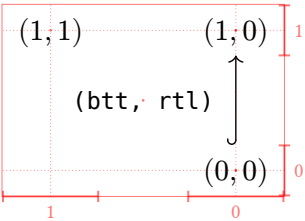
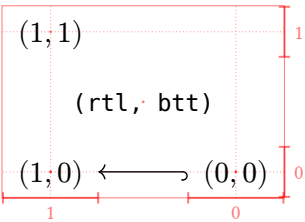
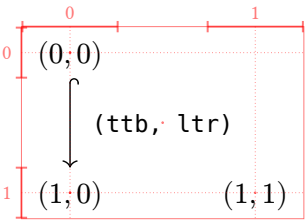
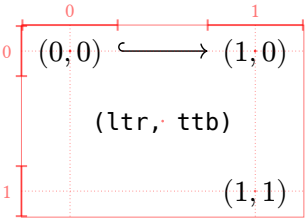
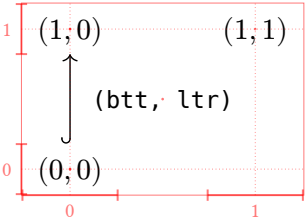
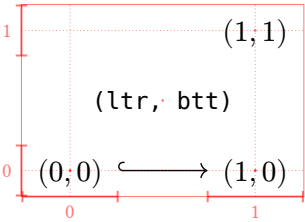
Make sure node or edge labels don't pick up equation numbers!

$$a^2 \quad (1)$$

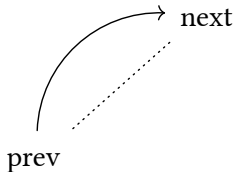
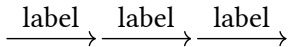


$$b^2 \quad (2)$$

# 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.

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| $A \longrightarrow B$    | $A \longrightarrow B$    | $A \longrightarrow B$    |
| $A \xrightarrow{\pi} B$  | $A \xrightarrow{\pi} B$  | $A \xrightarrow{\pi} B$  |
| $A \xrightarrow{\tau} B$ | $A \xrightarrow{\tau} B$ | $A \xrightarrow{\tau} B$ |
| $A \xrightarrow{+} B$    | $A \xrightarrow{+} B$    | $A \xrightarrow{+} B$    |

# Symbol arrow aliases

| Math                  | Unicode   | Mark    | Diagram   |
|-----------------------|---|---------|---|
| $\rightarrow$         | $\rightarrow$   | ->      |    |
| $\longrightarrow$     |    | ->      |    |
| $\leftarrow$          | $\leftarrow$  | <-      |    |
| $\leftrightarrow$     | $\leftrightarrow$   | <->     |    |
| $\longleftrightarrow$ |    | <->     |    |
| $\Rightarrow$         |    | ->>     |    |
| $\Leftarrow$          |    | <<-     |    |
| $\rightharpoonup$     |    | >->     |    |
| $\leftharpoonup$      |    | <-<     |    |
| $\Rightarrow$         | $\Rightarrow$   | =>      |    |
| $\Longrightarrow$     |    | =>      |    |
| $\Leftarrow$          |  | <=      |  |
| $\Leftrightarrow$     | $\Leftrightarrow$   | <=>     |  |
| $\Leftrightarrow$     |  | <=>     |  |
| $\mapsto$             | $\mapsto$   | ->      |  |
| $\mapsto$             |  | =>      |  |
| $\rightsquigarrow$    |  | none!   | none!   |
| $\leftsquigarrow$     |  | none!   | none!   |
| $\hookrightarrow$     |   | hook->  |  |
| $\hookleftarrow$      |   | <-hook' |  |

# Math-mode diagrams

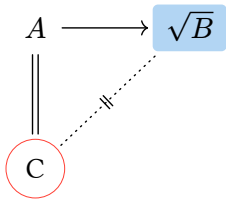
The following diagrams should be identical:

$$\begin{array}{ccc} G & \xrightarrow{f} & \operatorname{im}(f) \\ \pi \downarrow & \nearrow \tilde{f} & \\ G/\ker(f) & & \end{array}$$

$$\begin{array}{ccc} G & \xrightarrow{f} & \operatorname{im}(f) \\ \pi \downarrow & \nearrow \tilde{f} & \\ G/\ker(f) & & \end{array}$$

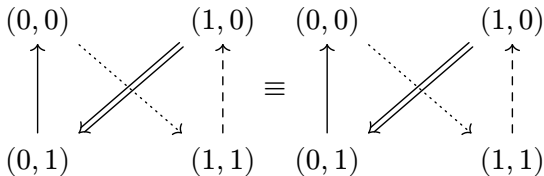


# Nodes in math-mode

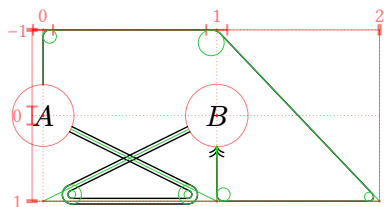
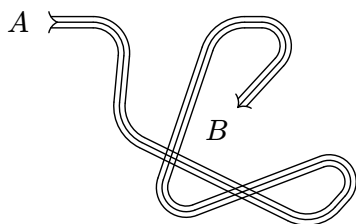
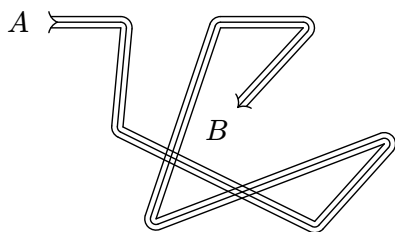
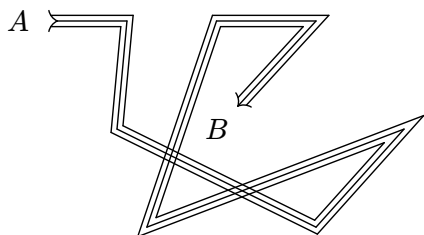


# Relative node coordinates

$$\begin{array}{ccc}
 G & \xrightarrow{f} & \text{im}(f) \\
 \pi \downarrow & \nearrow \tilde{f} & \\
 G/\ker(f) & & 
 \end{array}$$



## Edge paths



# Custom node shapes

