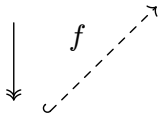


Connectors

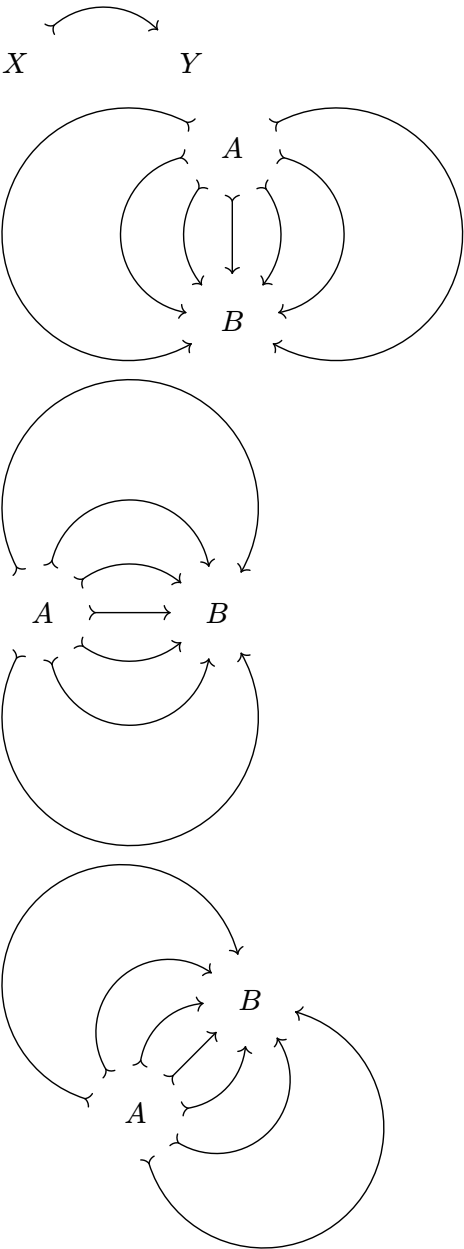
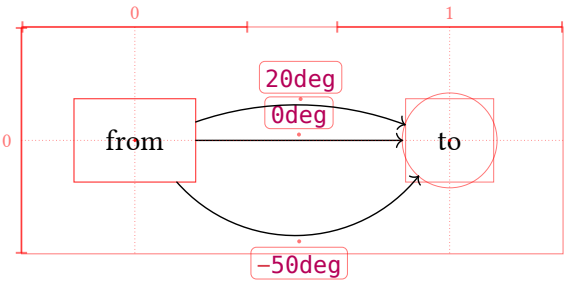


$X \longrightarrow Y$



Z

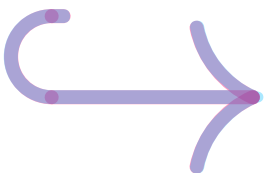
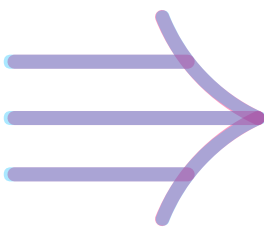
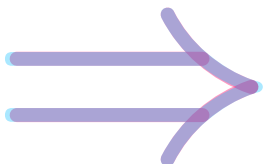
Arc connectors



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 $A \rightarrow B$.

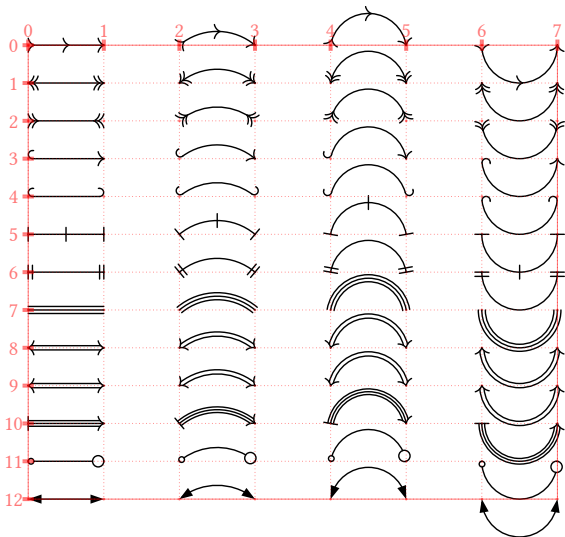
Diagram $A \xRightarrow{f} B$ and equation $A \Rightarrow B$.

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

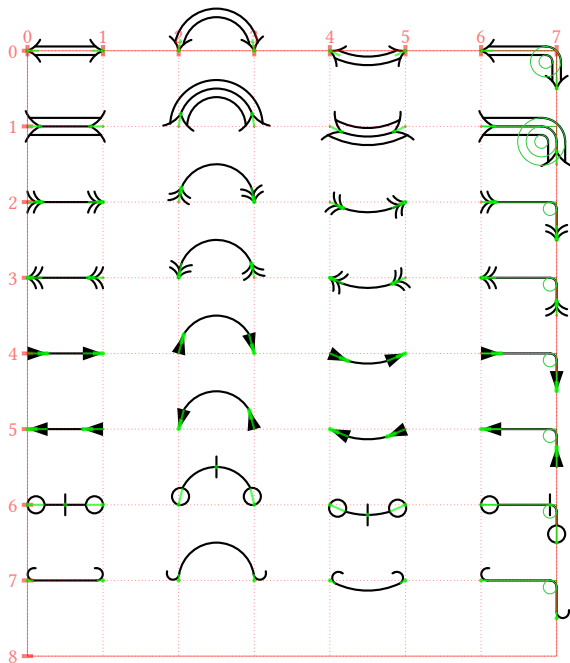
Arrow head shorthands

"->"	=	
"<-"	=	
">-<"	=	
"<->"	=	
"<=>"	=	
"<==>"	=	
" ->"	=	
" =>"	=	
">->"	=	
"<<->>"	=	
">>-<<"	=	
">>>-}>"	=	
"hook->"	=	
"hook' - - hook"	=	
" = "	=	
" - "	=	
" - "	=	
"/- - \\"	=	
"\\ = \\"	=	
"/=/"	=	
"x-X"	=	
">>-<<"	=	
"harpoon-harpoon'"	=	
"harpoon' -<<"	=	
"<- - hook'"	=	
" . . "	=	
"hooks - - hooks"	=	
"o-0"	=	
"0-0"	=	
"*-@"	=	
"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

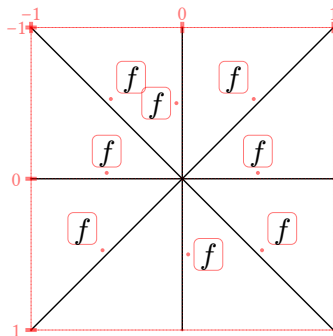


right


right

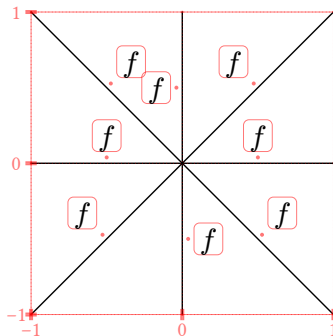

right

Automatic label placement

Default placement above the line.



Reversed y -axis:



Crossing connectors



edge() argument shorthands

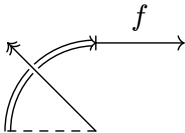
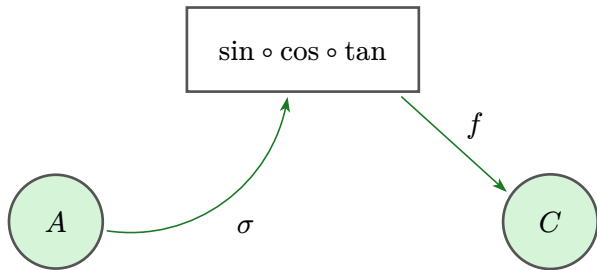
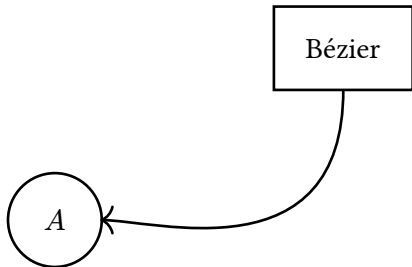


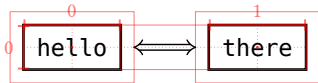
Diagram-level options



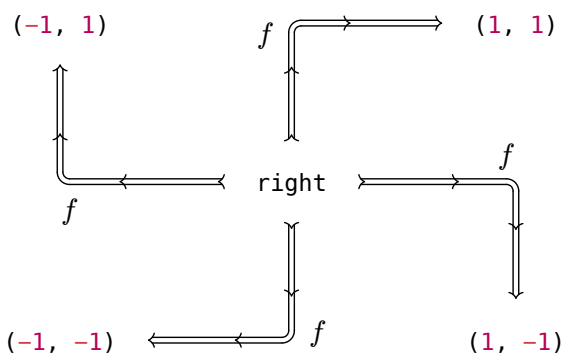
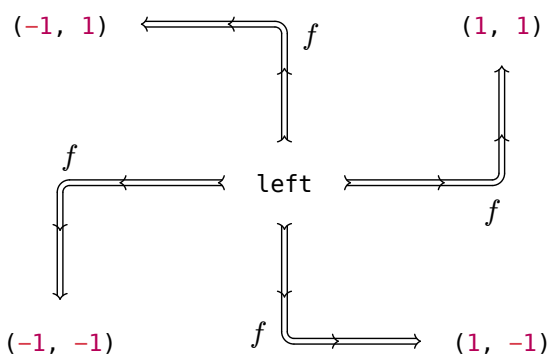
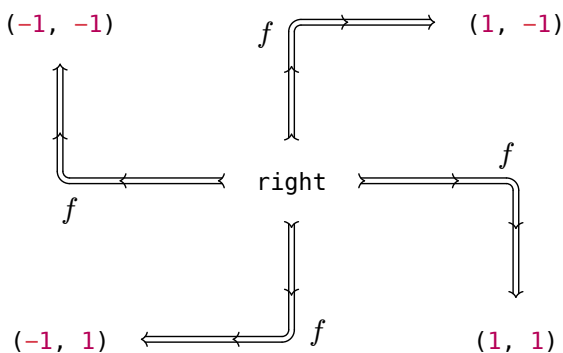
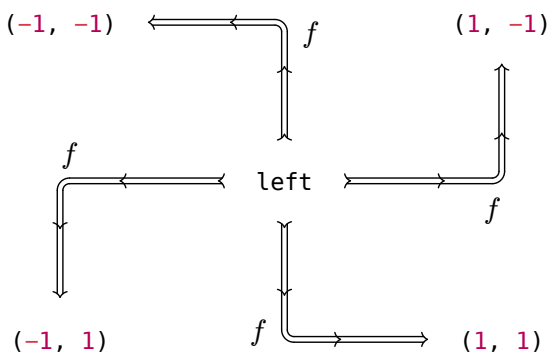
CeTZ integration



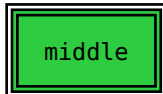
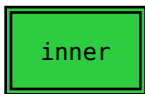
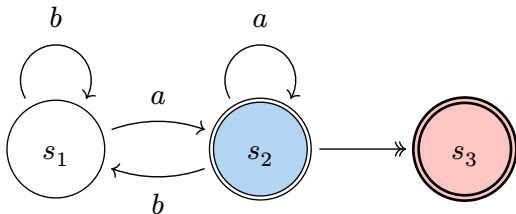
Node bounds, inset, and outset



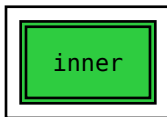
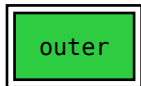
Corner edges



Double node strokes

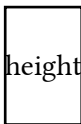
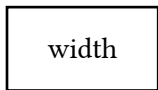


Relative and absolute extrusion lengths

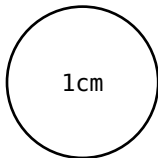


Custom node sizes

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



both



Node inset and outset

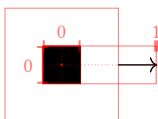
What 5mm inset should look like:



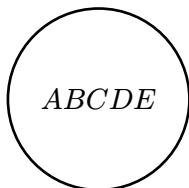
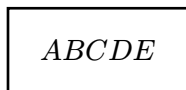
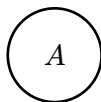
A diagram node with 5mm inset:



A diagram node with 5mm outset:



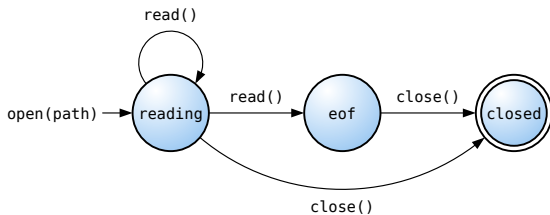
Circular insets:



Example

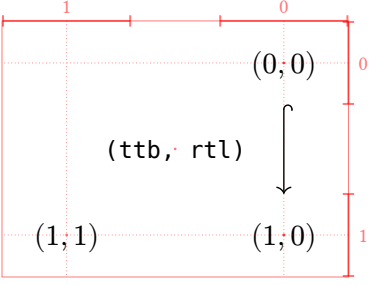
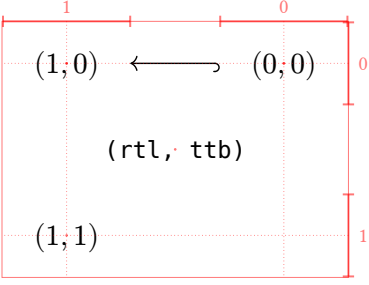
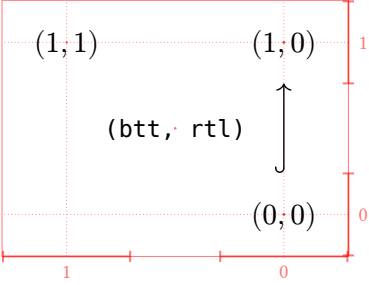
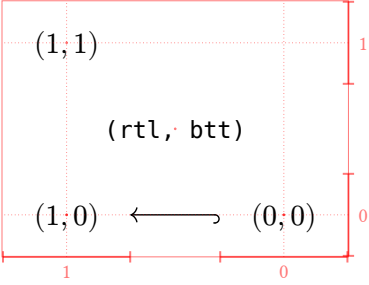
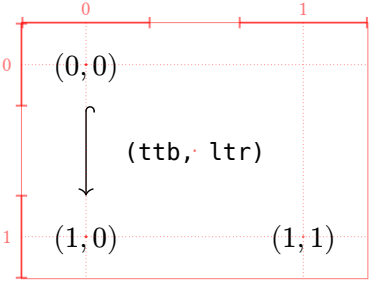
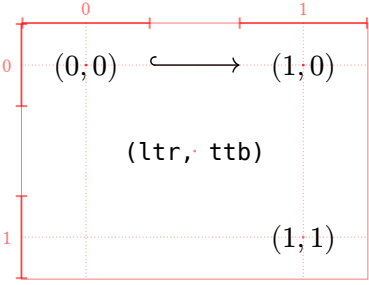
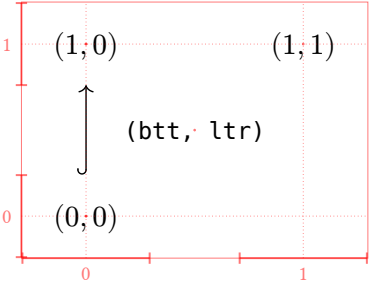
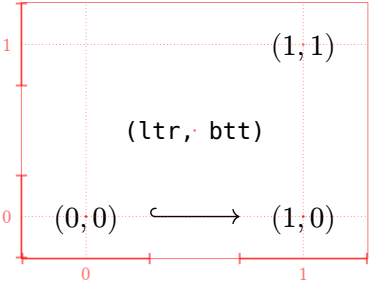
Make sure node or edge labels don't pick up equation numbers!

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

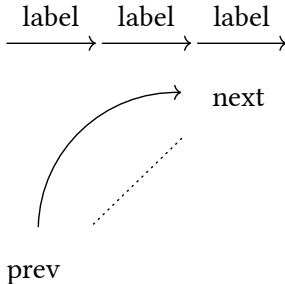


$$b^2 \quad (2)$$

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	BA	\longrightarrow	BA	\longrightarrow	B
	π		π		π	
A	$\xrightarrow{\pi}$	BA	$\xrightarrow{\pi}$	BA	$\xrightarrow{\pi}$	B
	τ		τ		τ	
A	$\xrightarrow{\tau}$	BA	$\xrightarrow{\tau}$	BA	$\xrightarrow{\tau}$	B
	$+$		$+$		$+$	
A	$\xrightarrow{+}$	BA	$\xrightarrow{+}$	BA	$\xrightarrow{+}$	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!
\leftrightsquigarrow		none!	none!
\hookrightarrow		hook->	
\hookleftarrow		<-hook'	

Math-mode diagrams

The following diagrams should be identical:

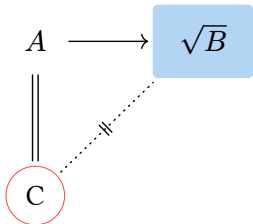
$$\begin{array}{ccc}
 G & \xrightarrow{f} & \operatorname{im}(f) \\
 \pi \downarrow & \nearrow \tilde{f} & \\
 & &
 \end{array}$$

$G/\ker(f)$

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

$G/\ker(f)$

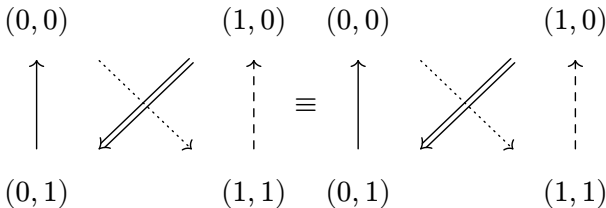
Nodes in math-mode



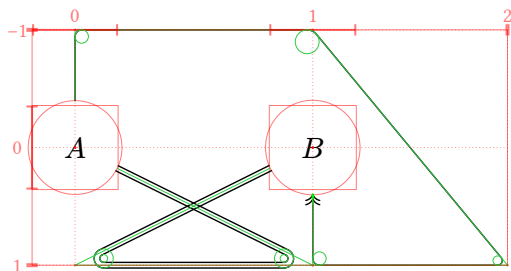
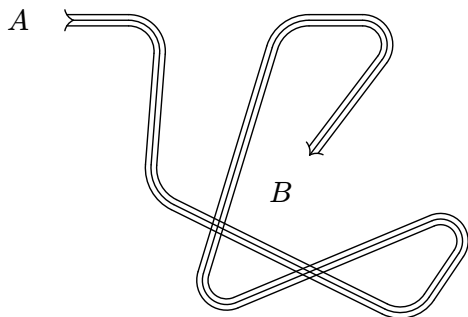
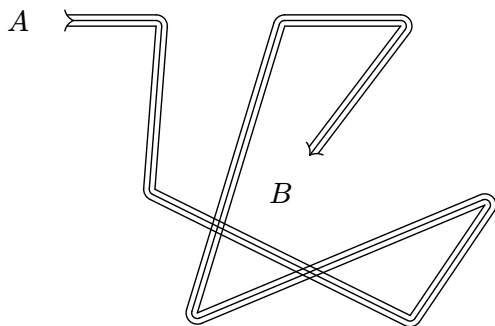
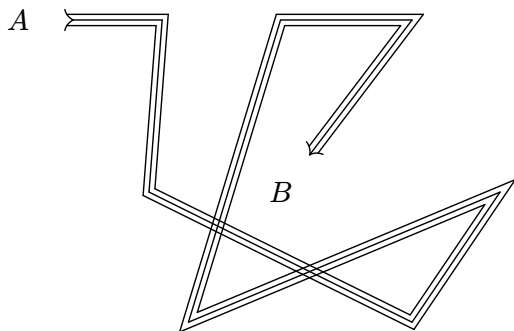
Relative node coordinates

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

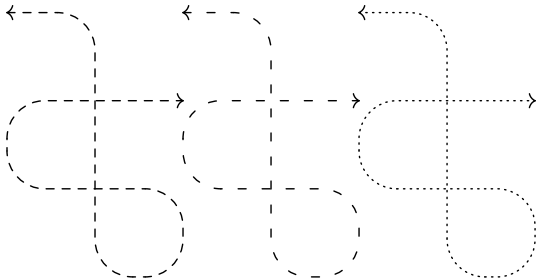
$$G / \ker(f)$$



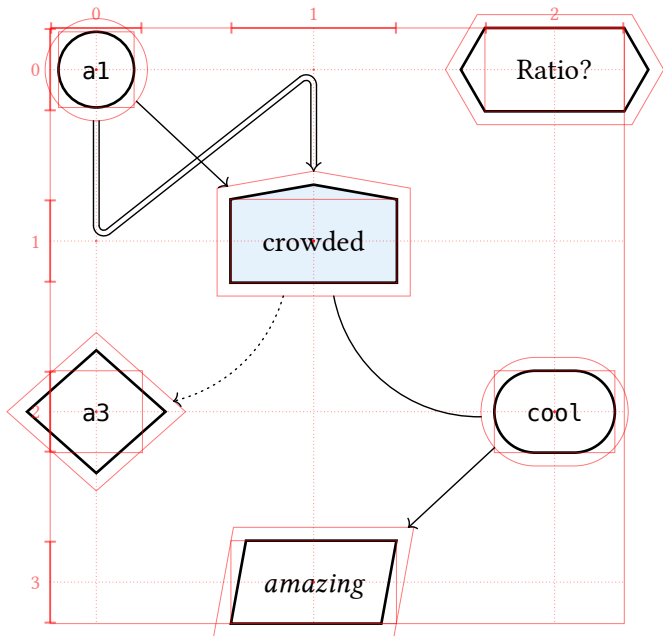
Edge paths



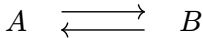
Dashed edge paths



Custom node shapes



Edge shift



Label fill

