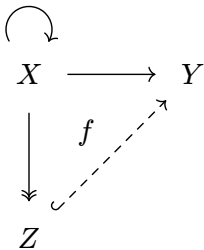
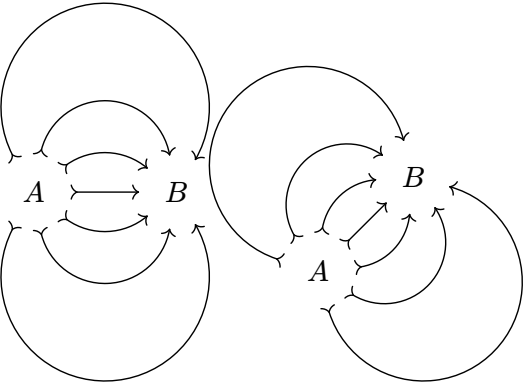
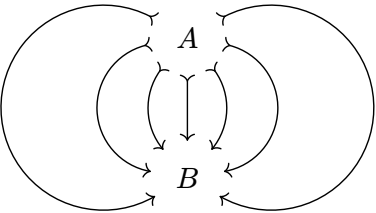
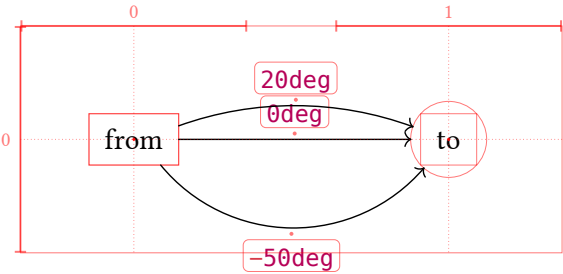


Connectors



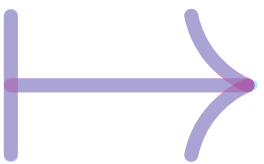
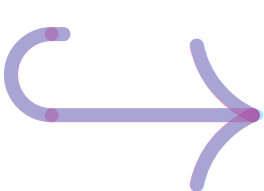
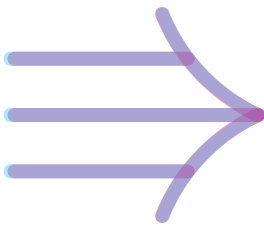
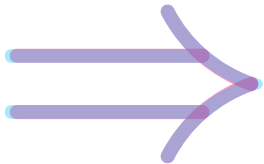
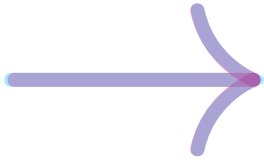
Arc connectors



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 $A \xRightarrow{\!\!\!f} B$ and equation $A \Rrightarrow B$.


Arrow head shorthands


"->" = 


"<-" = 


">-<" = 


"<->" = 


"<=>" = 


"<==>" = 


"|->" = 


"|=>" = 


">->" = 


"<<->>" = 


">>-<<" = 


">>>-}>" = 


"hook->" = 


"hook' - - hook" = 


"|=|" = 


"|||-||" = 


"||||-||||" = 


"/- - \\" = 


"\\ = \\" = 

"/=/" = 


"x-X" = 


">>-<<" = 


"harpoon-harpoon'" = 


"harpoon' -<<" = 


"<- - hook'" = 


"|. . |" = 


"hooks - - hooks" = 


"o-0" = 


"0-o" = 


"*-@" = 

"o==0" = 


"||->>" = 

"<| - |>" = 

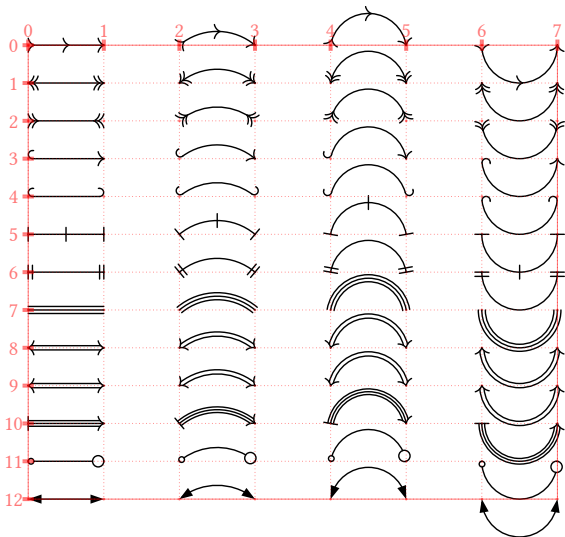
"|>-<|" = 

"-|- " = 

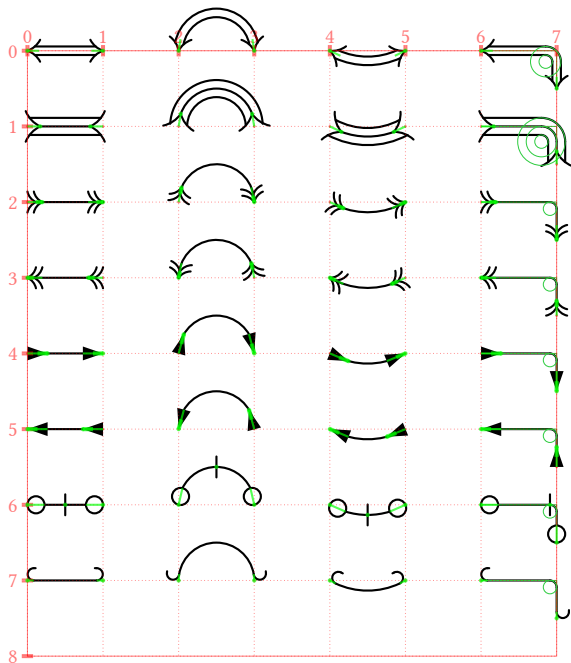
"hook-/->" = 

"<{-}>" = 

Bending arrows



Fine mark angle corrections




Defocus adjustment




Label side


left 

\center>


right

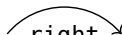
left


-center>


right

left


\center>


right

left 

left 

left 



center




center



center

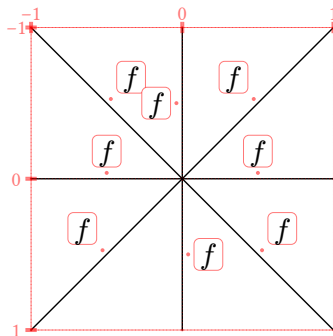


right


right

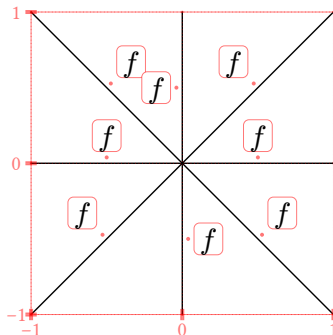

right

Automatic label placement

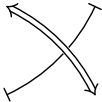
Default placement above the line.



Reversed y -axis:



Crossing connectors



edge() argument shorthands

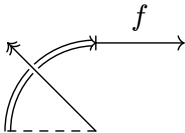
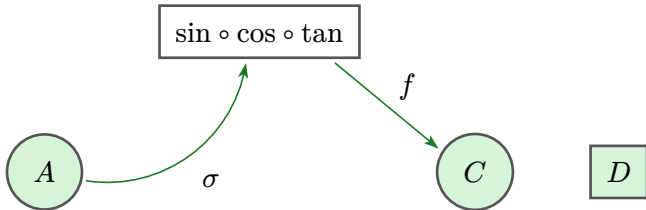
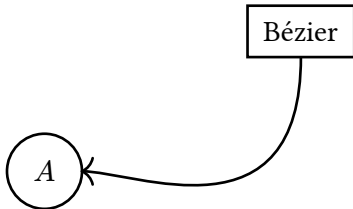


Diagram-level options



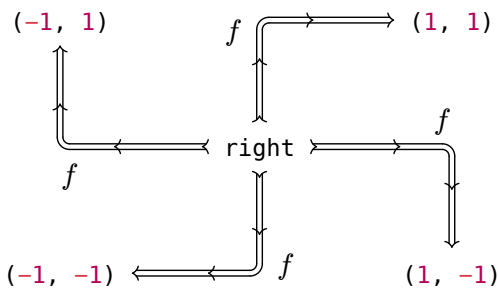
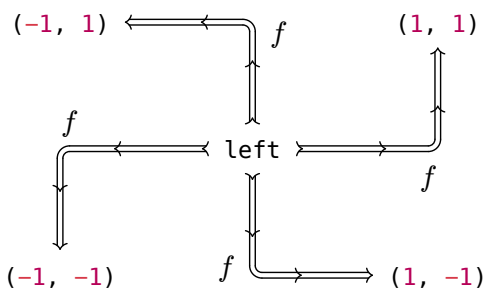
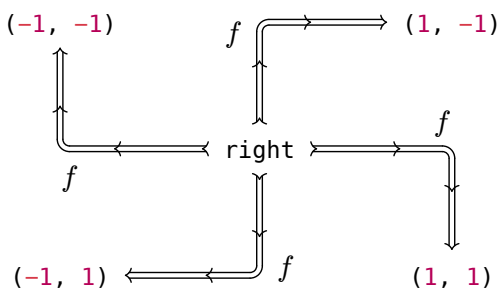
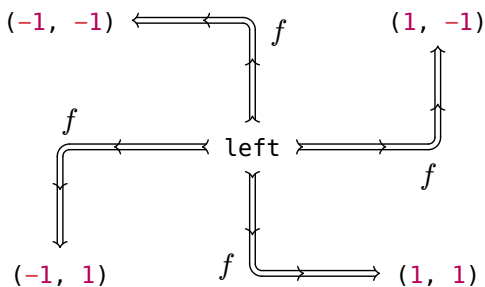
CeTZ integration



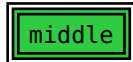
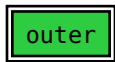
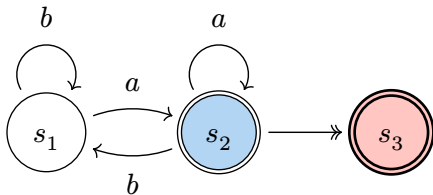
Node bounds, inset, and outset



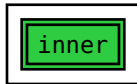
Corner edges



Double node strokes



Relative and absolute extrusion lengths

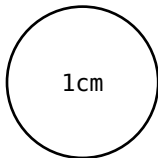


Custom node sizes

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



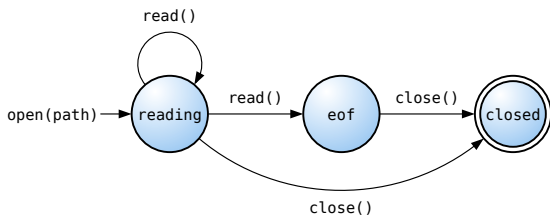
both



Example

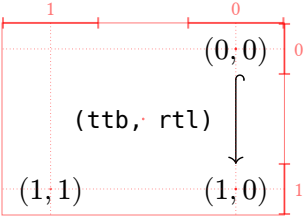
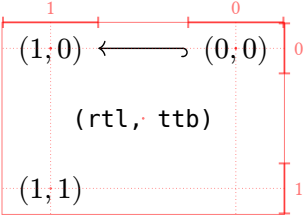
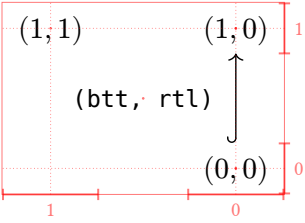
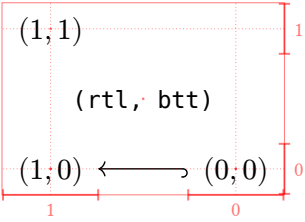
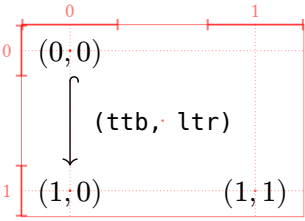
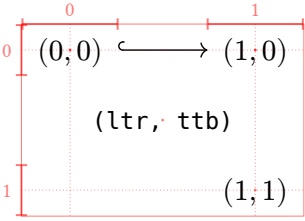
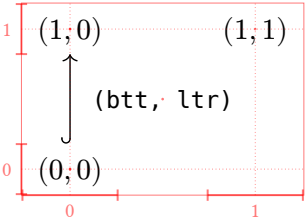
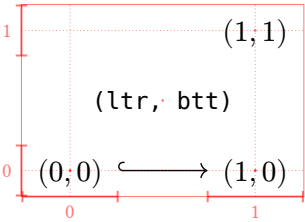
Make sure node or edge labels don't pick up equation numbers!

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

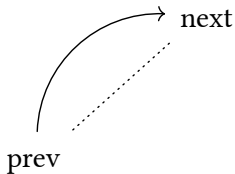
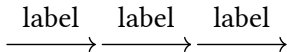


$$b^2 \quad (2)$$

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.

$$\begin{array}{lll} A \longrightarrow B & A \longrightarrow B & A \longrightarrow B \\ A \xrightarrow{\pi} B & A \xrightarrow{\pi} B & A \xrightarrow{\pi} B \\ A \xrightarrow{\tau} B & A \xrightarrow{\tau} B & A \xrightarrow{\tau} B \\ A \xrightarrow{+} B & A \xrightarrow{+} B & A \xrightarrow{+} B \end{array}$$

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'	

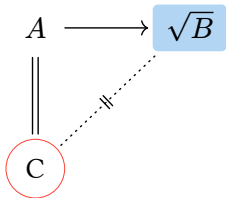
Math-mode diagrams

The following diagrams should be identical:

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

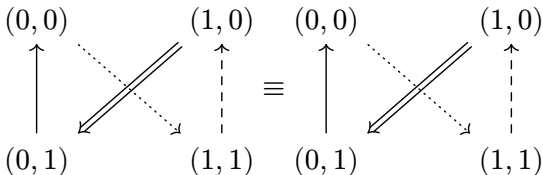
$$\begin{array}{ccc} G & \xrightarrow{f} & \operatorname{im}(f) \\ \downarrow \pi & \nearrow \tilde{f} & \\ G/\ker(f) & & \end{array}$$

Nodes in math-mode

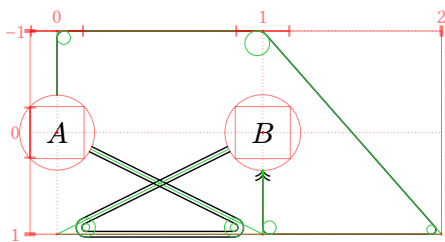
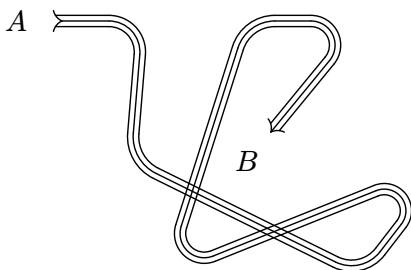
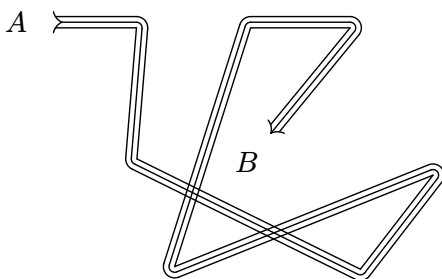
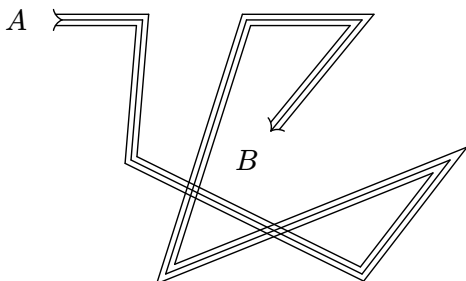


Relative node coordinates

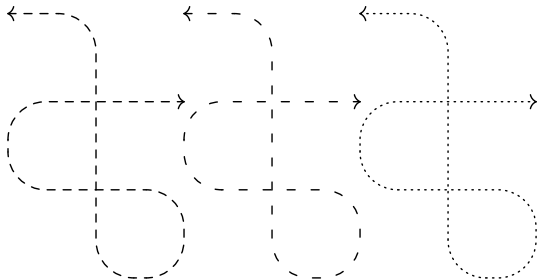
$$\begin{array}{ccc}
 G & \xrightarrow{f} & \text{im}(f) \\
 \downarrow \pi & \nearrow \tilde{f} & \\
 G/\ker(f) & &
 \end{array}$$



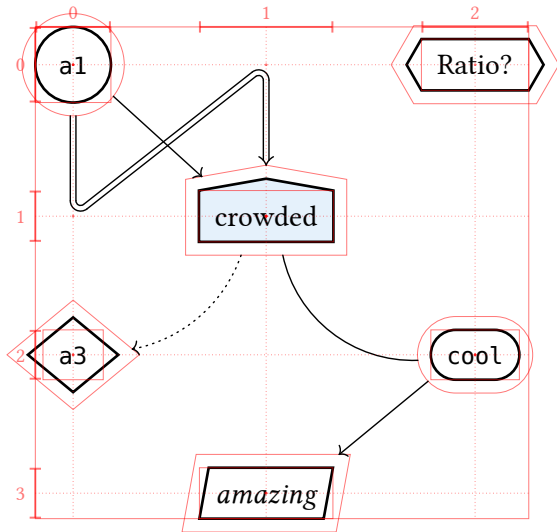
Edge paths



Dashed edge paths



Custom node shapes



Edge dodge

