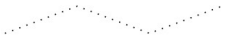
LINE STYLE

dotted, every mark/.append style={solid} 2

The following line styles are predefined in Ti*k*Z.

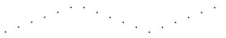
/tikz/solid (style, no value)

/tikz/dotted (style, no value)

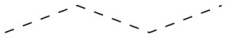


/tikz/densely dotted (style, no value)

/tikz/loosely dotted (style, no value)



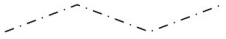
/tikz/dashed (style, no value)



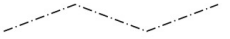
/tikz/densely dashed (style, no value)

/tikz/loosely dashed (style, no value)

/tikz/dashdotted (style, no value)

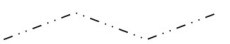


/tikz/densely dashdotted (style, no value)



/tikz/loosely dashdotted (style, no value)

/tikz/dashdotdotted (style, no value)



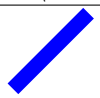
/tikz/densely dashdotdotted (style, no value)

/tikz/loosely dashdotdotted (style, no value)

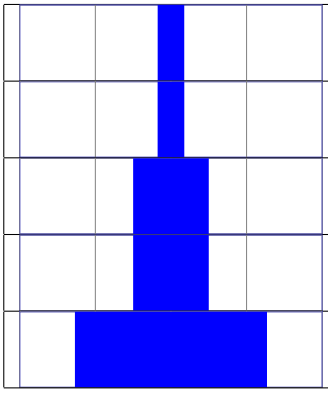
4 Parameters

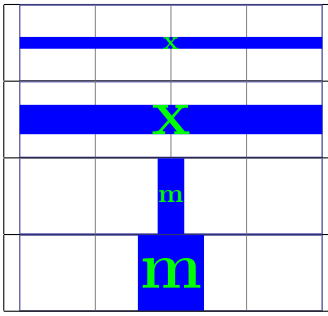
4.1 Line width

PGFmanual section : 15-3-1

\tikz \draw[line width=.2cm] (0,0) - - (1,1);			
			
[line width=.2cm]	[ultra thin] (0.1pt)	[very thin] (0.2pt)	[thin] (0.4pt)
			
[semithick] (0.6pt)	[thick] (0.8pt)	[very thick] (1.2pt)	[ultra thick] (1.6pt)

4.2 Dimensions available

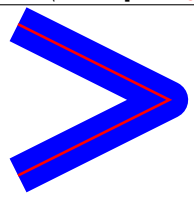
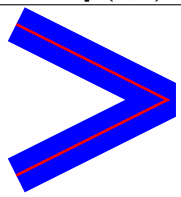
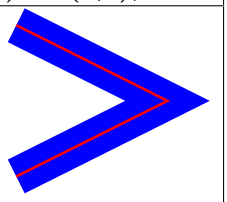
	\draw[line width=10pt] (2,0) to (2,1);
	\draw[line width=10bp] (2,0) to (2,1);
	\draw[line width=10mm] (2,0) to (2,1);
	\draw[line width=1cm] (2,0) to (2,1);
	\draw[line width=1in] (2,0) to (2,1);

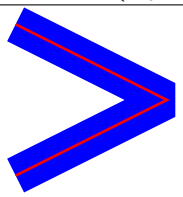
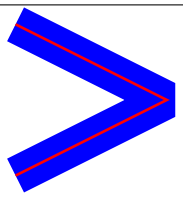
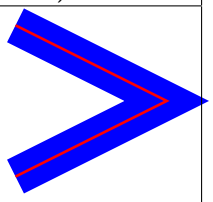
	\draw[line width=1ex] (0,0.5) to (4,.5);
	\Huge \draw[line width=1ex] (0,0.5) to (4,.5);
	\draw[line width=1em] (2,0) to (2,1);
	\Huge \draw[line width=1em] (2,0) to (2,1);

4.3 Terminators

		
[line cap=rect]	[line cap=butt]	[line cap=round]

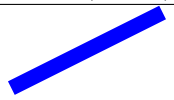
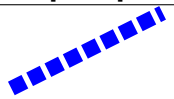
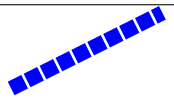
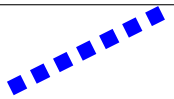
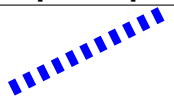
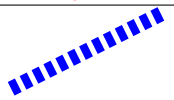
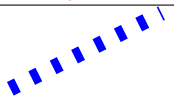
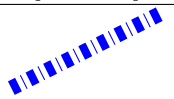
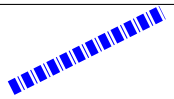
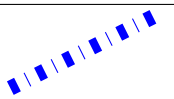
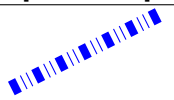
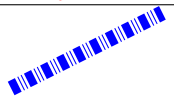
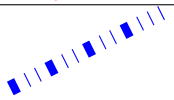
4.4 Lines junction

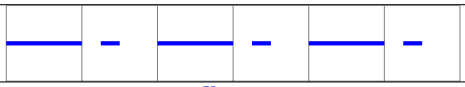
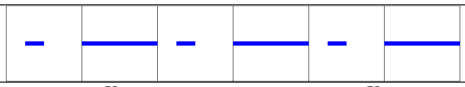
\draw[line join=round] (0,0) - - (2,1) - - (0,2);		
		
[line join=round]	[line join=bevel]	[line join=miter]

\draw[miter limit=1] (0,0) - - (2,1) - - (0,2); (By default : miter limit=10)		
		
miter limit=1	miter limit=2	miter limit=3

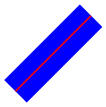
4.5 Line styles

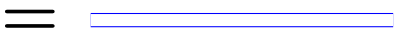
PGFmanual section : 15-3-2

\tikz \draw[solid,line width=2mm] (0,0) - - (2,1);		
		
[solid]		
		
[dotted]	[densely dotted]	[loosely dotted]
		
[dashed]	[densely dashed]	[loosely dashed]
		
[dash dot]	[densely dash dot]	[loosely dash dot]
		
[dash dot dot]	[densely dash dot dot]	[loosely dash dot dot]


[dash pattern= on 1cm off 0.25cm on 0.25cm off 0.5cm]

[dash pattern=on 1cm off .25cm on .25cm off .5cm,dash phase=1cm]

PGFmanual section : 15-3-4

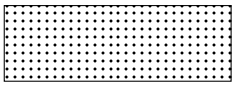
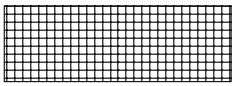
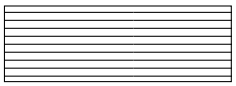
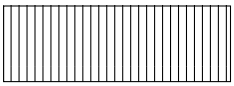
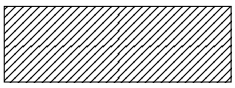
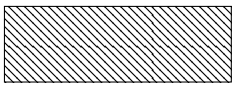
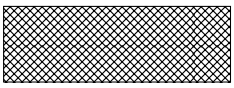
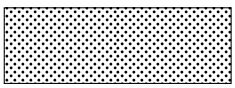
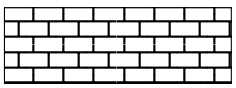
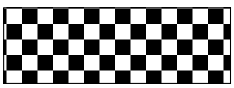
\tikz \draw[line width=.2cm,double] (0,0) - - (1,1);			
			
double	draw=blue,double=red	double distance=.3cm	double distance between line centers =.3cm

\Huge = \tikz \draw[double equal sign distance] (0,0) - - (4,0);	
	
\Huge	\large

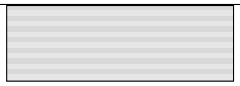
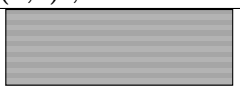
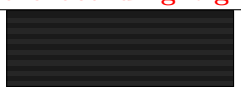
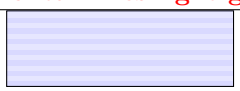
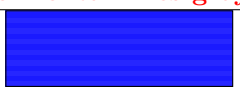
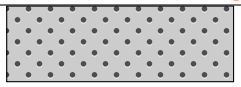
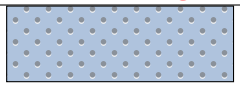
4.6 Fillings

PGFmanual section : 15-5-1 PGFmanual section : 60

Load package : \usetikzlibrary{patterns}

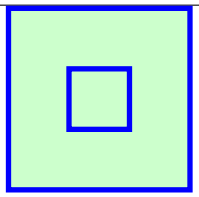
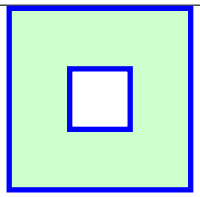
\draw[pattern= dots] (0,0) - - (3,1);		
		
dots	fivepointed stars	sixpointed stars
		
grid	horizontal lines	vertical lines
		
north east lines	north west lines	rosshatch
		
crosshatch dots	bricks	checkerboard

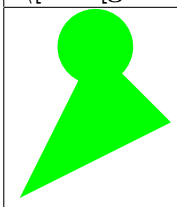
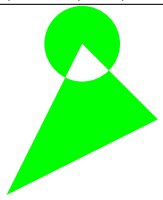
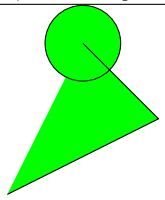
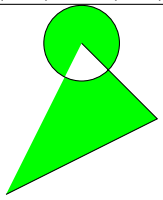

\draw[pattern=fivepointed stars,pattern color=red] (0,0) rectangle (3,1);

\draw[pattern=checkerboard light gray] (0,0) - - ((3,2) ;		
		
checkerboard light gray	horizontal lines light gray	horizontal lines gray
		
horizontal lines dark gray	horizontal lines light blue	horizontal lines dark blue
		
crosshatch dots gray	crosshatch dots light steel blue	

4.7 Filling rule

PGFmanual section : 15-5-2

nonzero rule (By default)	
	
\filldraw [fill=green!20] (0,0) - - (0,3) - - (3,3) - - (3,0) - - cycle (1,1) - - (1,2) - - (2,2) - -(2,1) - - cycle ;	\filldraw [fill=green!20] (0,0) - - (0,3) - - (3,3) - - (3,0) - - cycle (1,1) - - (2,1) - - (2,2) - -(1,2) - - cycle;

even odd rule		\filldraw[fill=green] (0,0) – (2,1) - - (1,2) circle (.5cm);	
\[fill=[green] (0,0) - - (2,1) - - (1,2) circle (.5cm);			
			
[fill=green]	[even odd rule,fill=green]	[fill=green]	[even odd rule,fill=green]

4.8 Filling with an image

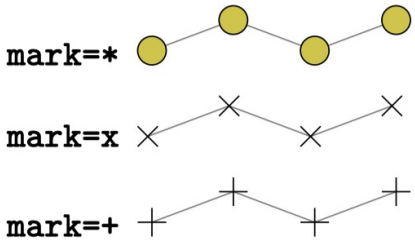
PGFmanual section : 15-6

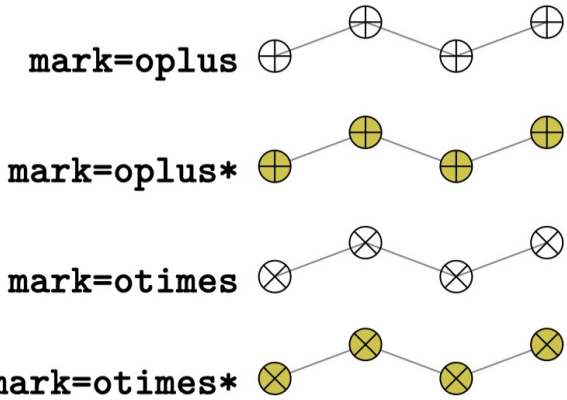
\draw [path picture={ \node at (path picture bounding box.center) {\includegraphics[height=3cm]{tiger}};}] (0,1) circle (1);		
		
(0,1) circle (1)	(0,0) - - (-1,1) - - (0,2) - - (1,1) - - cycle	(1,0) parabola[parabola height=2cm] (3,0)

POINT STYLE

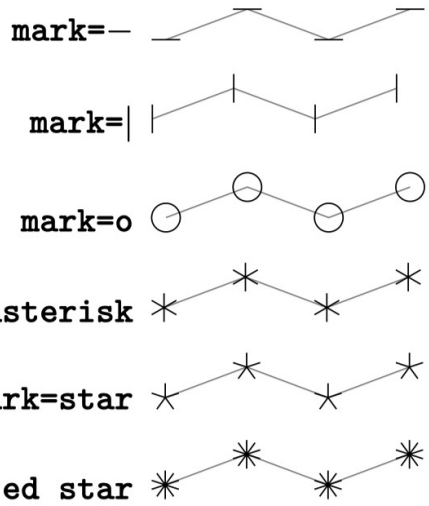
旋转 every mark/.append style={rotate=90}
大小 mark size=4pt

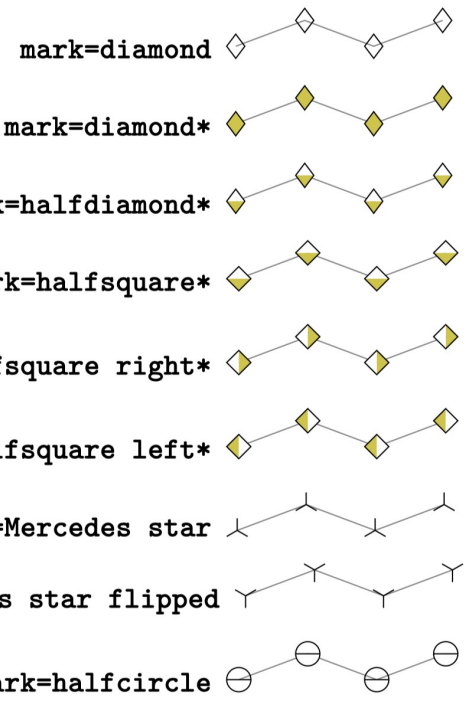
This list is copied from [7, Section 29]:



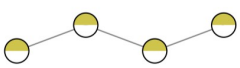


And with \usetikzlibrary{plotmarks}:

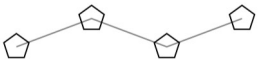


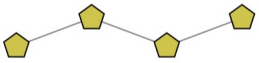


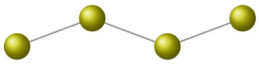
One half is filled with white (more precisely, with `mark color`).



One half is filled with white (more precisely, with `mark color`) and the other half is filled with the actual `fill` color.

mark=pentagon 

mark=pentagon* 

mark=ball 

This marker is special and can easily generate big output files if there are lots of them. It is also special in that it needs `ball color` to be set (in our case, it is `ball color=yellow!80!black`.

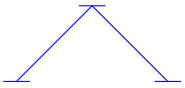
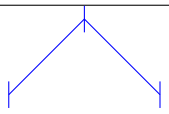
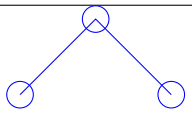
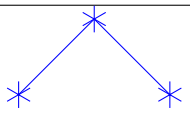
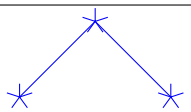
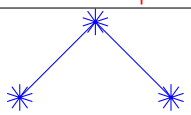
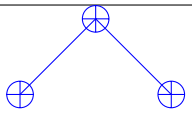
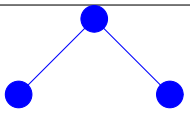
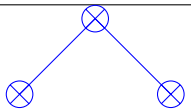
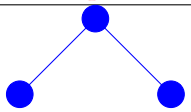
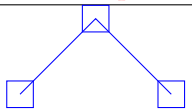
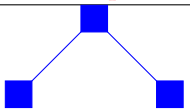
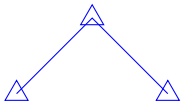
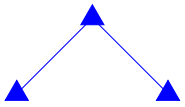
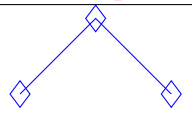
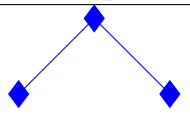
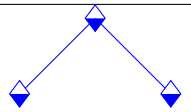
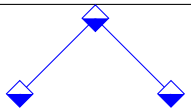
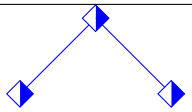
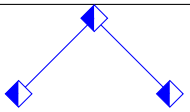
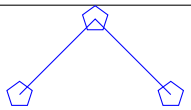
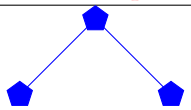
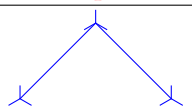
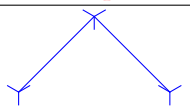
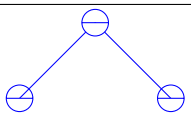
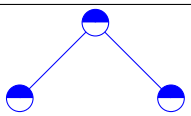
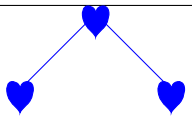
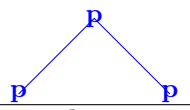
mark=text 

This marker is special as it can be configured freely. The character (or even text) used is configured by a set of variables, see below.

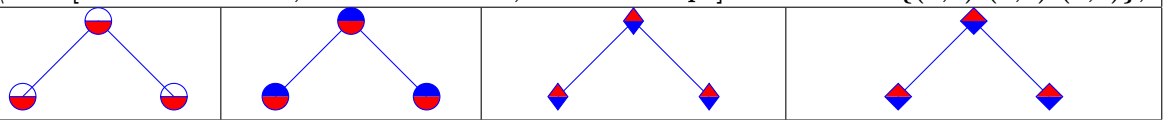
22.2.3 Marks with plotmarks library

Load package : \usetikzlibrary{plotmarks}

PGFmanual section : 63

			
mark=-	mark=|	mark=o	mark=asterisk
			
mark=star	mark=10-pointed star	mark=oplus	mark=oplus*
			
mark=otimes	mark=otimes*	mark=square	mark=square*
			
mark=triangle	mark=triangle*	mark=diamond	mark=diamond*
			
mark=halfdiamond*	mark=halfsquare*	mark=halfsquare right*	mark=halfsquare left*
			
mark=pentagon	mark=pentagon*	mark=Mercedes star	mark=Mercedes star flipped
			
mark=halfcircle	mark=halfcircle*	mark=heart	mark=text

```
\draw[mark=halfcircle,mark color=red,mark size=5pt] coordinates {(0,0) (1,1) (2,0)};
```



mark=halfcircle	mark=halfcircle*	mark=halfdiamond*	mark=halfsquare*

22.3 Graph with Gnuplot

```
\draw[color=red] plot[id=sin] function{sin(x)} ;
```

==> plot[id=sin] create the file “sin.gnuplot”
==> Open the file “sin.gnuplot” with the program gnuplot : creation of the file “sin.table”
==> Use the datafile “sin.table”