

TikZ commends tutorial

Yi-Chen Zhang

January 3, 2018

The TikZ commands can be inside the environment `\begin{tikzpicture} ... \end{tikzpicture}` or simply use `\tikz` clause. We run `pdflatex` or `latex` followed by `dvips` to execute the TikZ commands.

1 Preliminary

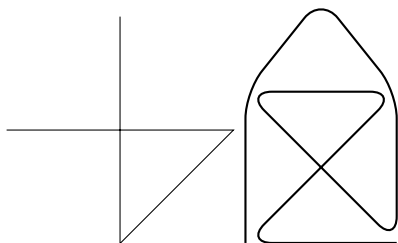
1.1 Straight Path Construction

Usage:

```
\draw[options] (x1,y1) -- (x2,y2) -- (x3,y3);
```

Example:

```
\draw (-1.5,0) -- (1.5,0) -- (0,-1.5) -- (0,1.5);  
\draw[thick, rounded corners=10pt]  
  (0,0) -- (0,2) -- (1,3.25) -- (2,2) -- (2,0) -- (0,2) -- (2,2) -- (0,0) -- (2,0);
```



1.2 Circle Path Construction

Usage:

```
\draw[options] (x,y) circle (radius)  
\draw[options] (x,y) ellipse (radius1 and radius2)
```

Example:

```
\draw (0,0) circle (2pt);  
\draw[red] (1,0) circle (3pt);  
\draw[fill=red] (2,0) circle (4pt);  
\draw[red,fill=red] (3,0) circle (5pt);  
\filldraw[blue,rotate=30] (3.5,-2) ellipse (10pt and 5pt);
```

