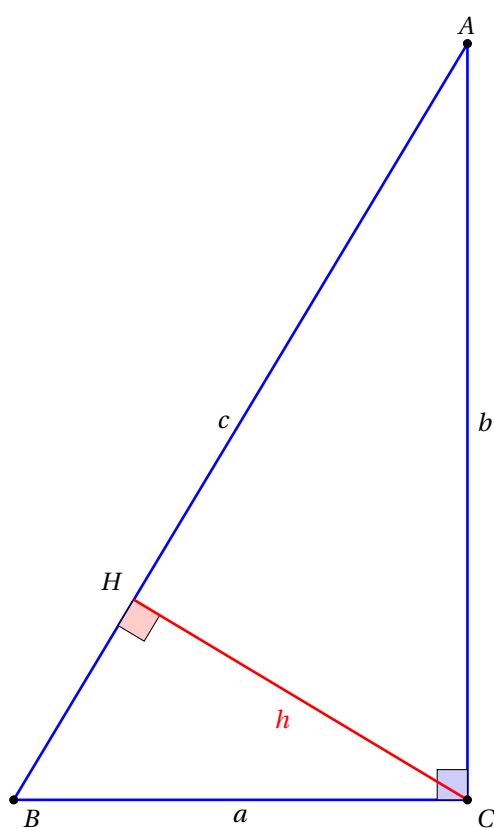


1 个性化设置

1.1 `\tkzSetUpLine`命令：设置线条样式

<code>\tkzSetUpLine</code> [< 命令选项>]		
选项	默认值	含义
color	black	颜色
line width	0.4pt	线宽
style	solid	线型
add	.2 and .2	线段两端延伸长度

1.1.1 改变线宽示例

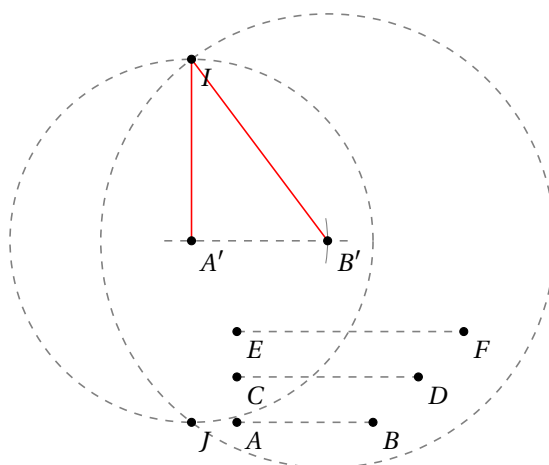


```

\begin{tikzpicture}
  \tkzSetUpLine[color=blue,line width=1pt]
  \begin{scope}[rotate=-90]
    \tkzDefPoint(10,6){C}
    \tkzDefPoint( 0,6){A}
    \tkzDefPoint(10,0){B}
    \tkzDefPointBy[projection = onto B--A](C)
    \tkzGetPoint{H}
    \tkzDrawPolygon(A,B,C)
    \tkzMarkRightAngle[size=.4,fill=blue!20](B,C,A)
    \tkzMarkRightAngle[size=.4,fill=red!20](B,H,C)
    \tkzDrawSegment[color=red](C,H)
  \end{scope}
  \tkzLabelSegment[below](C,B){$a$}
  \tkzLabelSegment[right](A,C){$b$}
  \tkzLabelSegment[left](A,B){$c$}
  \tkzLabelSegment[color=red](C,H){$h$}
  \tkzDrawPoints(A,B,C)
  \tkzLabelPoints[above left](H)
  \tkzLabelPoints(B,C)
  \tkzLabelPoints[above](A)
\end{tikzpicture}

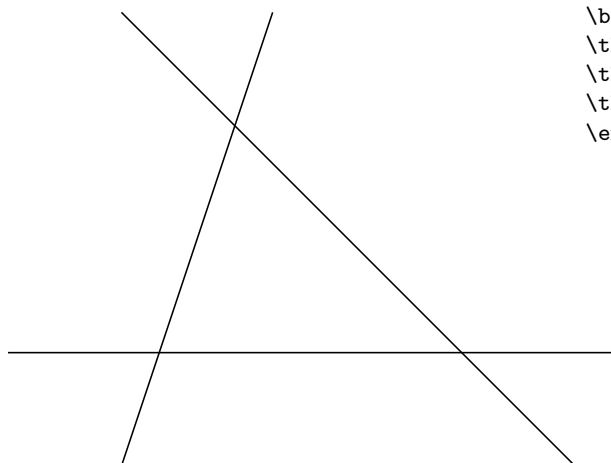
```

1.1.2 改变线型示例



```
\begin{tikzpicture}[scale=.6]
\tkzDefPoint(1,0){A} \tkzDefPoint(4,0){B}
\tkzDefPoint(1,1){C} \tkzDefPoint(5,1){D}
\tkzDefPoint(1,2){E} \tkzDefPoint(6,2){F}
\tkzDefPoint(0,4){A'}\tkzDefPoint(3,4){B'}
\tkzCalcLength[cm](C,D) \tkzGetLength{rCD}
\tkzCalcLength[cm](E,F) \tkzGetLength{rEF}
\tkzInterCC[R](A',\rCD cm)(B',\rEF cm)
\tkzGetPoints{I}{J}
\tkzSetUpLine[style=dashed,color=gray]
\tkzDrawLine(A',B')
\tkzCompass(A',B')
\tkzDrawSegments(A,B C,D E,F)
\tkzDrawCircle[R](A',\rCD cm)
\tkzDrawCircle[R](B',\rEF cm)
\tkzSetUpLine[color=red]
\tkzDrawSegments(A',I B',I)
\tkzDrawPoints(A,B,C,D,E,F,A',B',I,J)
\tkzLabelPoints(A,B,C,D,E,F,A',B',I,J)
\end{tikzpicture}
```

1.1.3 线段延伸示例



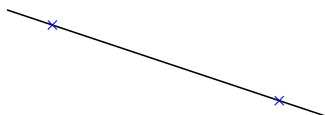
```
\begin{tikzpicture}
\tkzSetUpLine[add=.5 and .5]
\tkzDefPoints{0/0/A,4/0/B,1/3/C}
\tkzDrawLines(A,B B,C A,C)
\end{tikzpicture}
```

1.2 \tkzSetUpPoint命令：设置点样式

`\tkzSetUpPoint[< 命令选项>]`

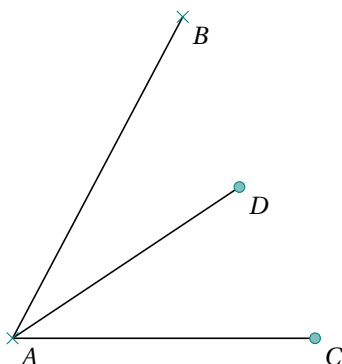
选项	默认值	含义
color	black	颜色
size	3pt	尺寸
fill	black!50	填充色
shape	circle	圆或十字线

1.2.1 示例 1



```
\begin{tikzpicture}
\tkzSetUpPoint[shape = cross out,color=blue]
\tkzInit[xmax=100,xstep=20,ymax=.5]
\tkzDefPoint(20,1){A}
\tkzDefPoint(80,0){B}
\tkzDrawLine(A,B)
\tkzDrawPoints(A,B)
\end{tikzpicture}
```

1.2.2 示例 2



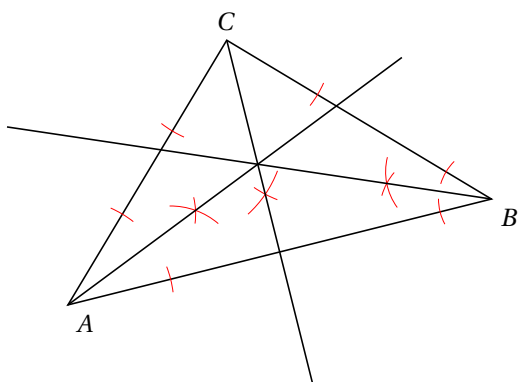
```
\begin{tikzpicture}
\tkzInit[ymin=-0.5,ymax=3,xmin=-0.5,xmax=7]
\tkzDefPoint(0,0){A}
\tkzDefPoint(02.25,04.25){B}
\tkzDefPoint(4,0){C}
\tkzDefPoint(3,2){D}
\tkzDrawSegments(A,B A,C A,D)
\tkzSetUpPoint[shape=cross out,
fill= teal!50,
size=4,color=teal]
\tkzDrawPoints(A,B)}
\tkzSetUpPoint[fill= teal!50,size=4,
color=teal]
\tkzDrawPoints(C,D)
\tkzLabelPoints(A,B,C,D)
\end{tikzpicture}
```

1.3 \tkzSetUpCompass命令：设置尺规标记样式

`\tkzSetUpCompass[< 命令选项>]`

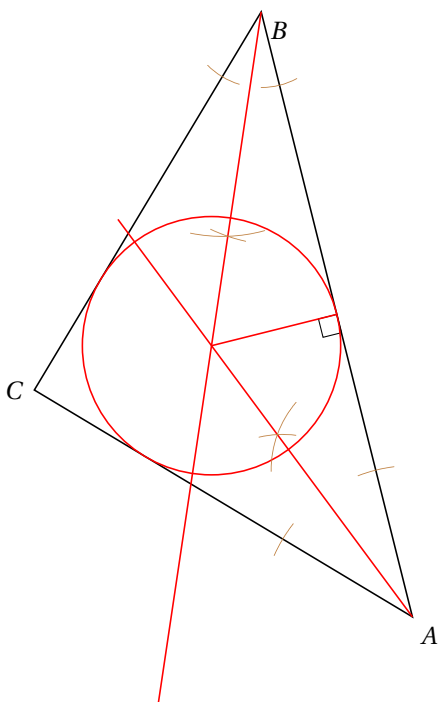
选项	默认值	含义
color	black	圆弧颜色
line width	0.4pt	圆弧线宽
style	solid	圆弧线型

1.3.1 示例 1



```
\begin{tikzpicture}[scale=0.7]
\tkzDefPoints{0/1/A, 8/3/B, 3/6/C}
\tkzDrawPolygon(A,B,C)
\tkzSetUpCompass[color=red,line width=.2 pt]
\tkzDefLine[bisector](A,C,B) \tkzGetPoint{c}
\tkzDefLine[bisector](B,A,C) \tkzGetPoint{a}
\tkzDefLine[bisector](C,B,A) \tkzGetPoint{b}
\tkzShowLine[bisector,size=2,gap=3](A,C,B)
\tkzShowLine[bisector,size=2,gap=3](B,A,C)
\tkzShowLine[bisector,size=1,gap=2](C,B,A)
\tkzDrawLines[add=0 and 0](B,b)
\tkzDrawLines[add=0 and -.4](A,a C,c)
\tkzLabelPoints(A,B) \tkzLabelPoints[above](C)
\end{tikzpicture}
```

1.3.2 示例 2



```
\begin{tikzpicture}[scale=1,rotate=90]
\tkzDefPoints{0/1/A, 8/3/B, 3/6/C}
\tkzDrawPolygon(A,B,C)
\tkzSetUpCompass[color=brown,
    line width=.3 pt,style=tikzdotted]
\tkzDefLine[bisector](B,A,C) \tkzGetPoint{a}
\tkzDefLine[bisector](C,B,A) \tkzGetPoint{b}
\tkzInterLL(A,a)(B,b) \tkzGetPoint{I}
\tkzDefPointBy[projection= onto A--B](I)
\tkzGetPoint{H}
\tkzMarkRightAngle(I,H,A)
\tkzDrawCircle[radius,color=red](I,H)
\tkzDrawSegments[color=red](I,H)
\tkzDrawLines[add=0 and -.5,,color=red](A,a)
\tkzDrawLines[add=0 and 0,color=red](B,b)
\tkzShowLine[bisector,size=2,gap=3](B,A,C)
\tkzShowLine[bisector,size=1,gap=3](C,B,A)
\tkzLabelPoints(A,B)\tkzLabelPoints[left](C)
\end{tikzpicture}
```

1.4 局部样式设置

既可以使用 `tkzSetUpPoint` 设置全局样式，也使用 `TikZ` 选项设置局部样式。

```
○ A \tkzSetUpPoint[color=blue!50!white, fill=gray!20!red!50!white]
\begin{tikzpicture}
\tkzDefPoint(0,0){O}
\tkzDefPoint(0,1){A}
\tkzDrawPoints(O) % general style
\tkzDrawPoints[mystyle,size=4](A) % my style
\tkzLabelPoints(O,A)
\end{tikzpicture}
```