pst-turtle

Turtle graphics; v.0.02

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Contents

1	Usage	

References 5

Contents 2

pst-turtle loads by default the following packages: pstricks, and pst-xkey. All should be already part of your local TeX installation. If not, or in case of having older versions, go to http://www.CTAN.org/ and load the newest version.

1 Usage 3

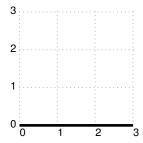
1 Usage

```
\psTurtle [Options] (x_0, y_0) { Turtle\ code}
```

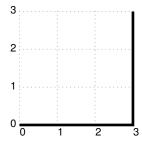
The turle commands must be in PostScript notation, where you can use the short or long version of the commands:

```
/bk { back } bind def
/fd { forward } bind def
/lt { left } bind def
/pd { pendown } bind def
/pu { penup } bind def
/rt { right } bind def
```

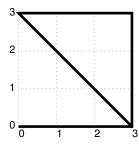
The default unit is cm.



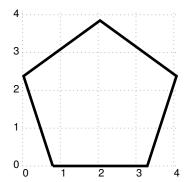
```
\begin{pspicture}[showgrid](3,3)
\psTurtle[linewidth=2pt,arrows=->](0,0){ 3 forward }
\end{pspicture}
```



```
\begin{pspicture}[showgrid](3,3)
\psTurtle[linewidth=2pt,arrows=->](0,0){
  3 fd
  90 left 3 fd }
\end{pspicture}
```



```
\begin{pspicture}[showgrid](3,3)
\psTurtle[linewidth=2pt,arrows=->](0,0){
   3 fd
   90 left 3 fd
   90 left 3 fd
   135 left 18 sqrt fd}
\end{pspicture}
```

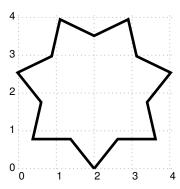


```
\begin{pspicture}[showgrid](4,4)
\psTurtle[linewidth=2pt](0.8,0){
   5 { 2.5 fd 72 left } repeat
}
\end{pspicture}
```

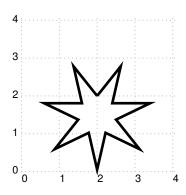
1 Usage 4

```
1
0
0 1 2 3 4
```

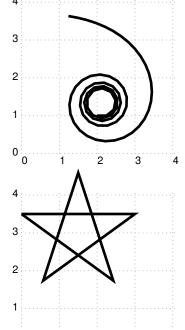
```
\begin{pspicture}[showgrid](4,4)
\psTurtle[linewidth=2pt](2,1){
   5 { 72 left 1 fd 72 right 1 fd 72 left} repeat
}
\end{pspicture}
```



```
\begin{pspicture}[showgrid](4,4)
\psTurtle[linewidth=2pt](2,0){
  /Angle { 360 7 div } bind def
  7 { Angle left 1 fd Angle right 1 fd Angle left} repeat
}
\end{pspicture}
```



```
\begin{pspicture}[showgrid](4,4)
\psTurtle[linewidth=2pt](2,2){
  /Angle { 360 7 div } bind def
  7 { Angle left 1 fd Angle 3 mul right 1 fd Angle left} repeat
}
\end{pspicture}
```

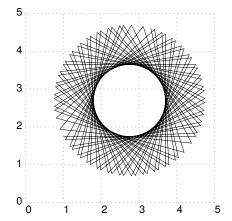


2

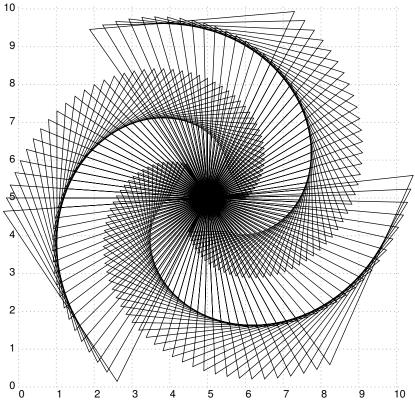
```
\begin{pspicture}[showgrid](4,4)
\psTurtle[linewidth=2pt](2,1){
  /Angle 40 def
  75 { 0.25 fd Angle left /Angle Angle 0.5 sub def } repeat
}
\end{pspicture}
```

```
\begin{pspicture}[showgrid](4,4)
\psTurtle[linewidth=2pt](0,3.5){
    5 { 3 fd 144 right } repeat
}
\end{pspicture}
```

References 5



```
\begin{pspicture}[showgrid](5,5)
\psTurtle[linewidth=0.2pt](1,1.75){
  75 { 3.5 fd 123 left } repeat
}
\end{pspicture}
```



References

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- [4] Nikolai G. Kollock. PostScript richtig eingesetzt: vom Konzept zum praktischen Einsatz. Vaterstetten: IWT, 1989.
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References 6

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- [15] Timothy van Zandt **and** Herbert Voß. pst-plot: Plotting two dimensional functions and data. 1999. URL: /graphics/pstricks/generic/pst-plot.tex.

pst-turtle-doc

Index

```
Macro
\psTurtle, 3

Package

pst-turtle, 2

pst-xkey, 2

pstricks, 2

pst-turtle, 2

pstricks, 2

pstricks, 2

\psTurtle, 3
```