Software Review: PSTricks

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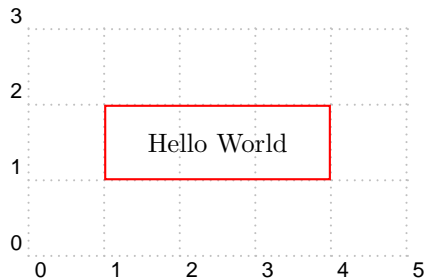
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1 Why PSTricks?

PSTricks, written by Timothy Van Zandt, is a tool to draw any kinds of images including simple lines to complex graphs that is used in daily life in different fields. PSTricks uses PostScript's image creation language within LaTeX code and built-in commands make it easier to use.
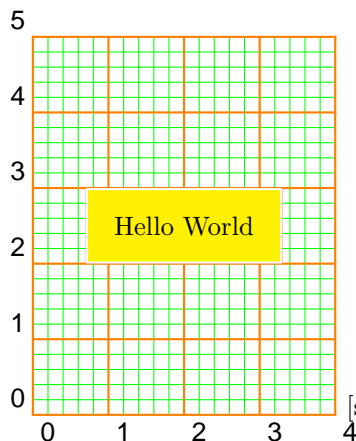
1.1 Example

\beginpspicture[showgrid](4,3)
\psframe[linecolor=red](10,2)(13,3)
\rput[color=red](11.5,2.5)Hello World
\endpspicture

[showgrid] option makes it easier to apply the image since you can see see at which coordinate you would like to locate your image.

1.2 Coordinate System

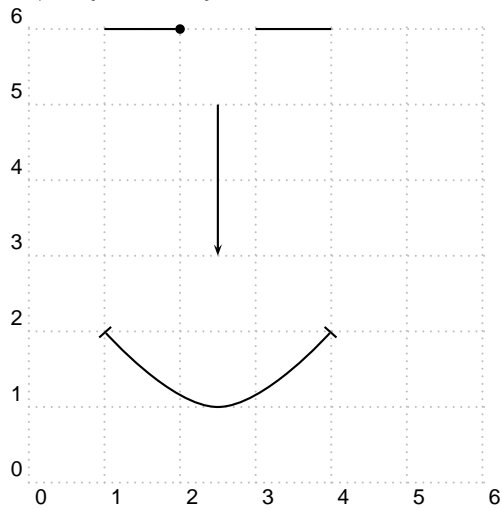[showgrid] is part of *PostScript* which makes it visible but \psgrid is a

drawn image on [showgrid].

1.3   Line and Arrows

\begin{pspicture}[showgrid](6,6)
\psline {−∗} (1,6)(2,6)
\psline {−}(3,6)(4,6)
\psline {− >}(2.5,5)(2.5,3)
\pscurve {| − |}(1,2)(2.5,1)(4,2)
\end{pspicture}

As you can see on how given codes are related to the image above.
{−∗} is for a line with ending point bolded.
{−} is for a straight line.
{− >} is for line with one side continuous.
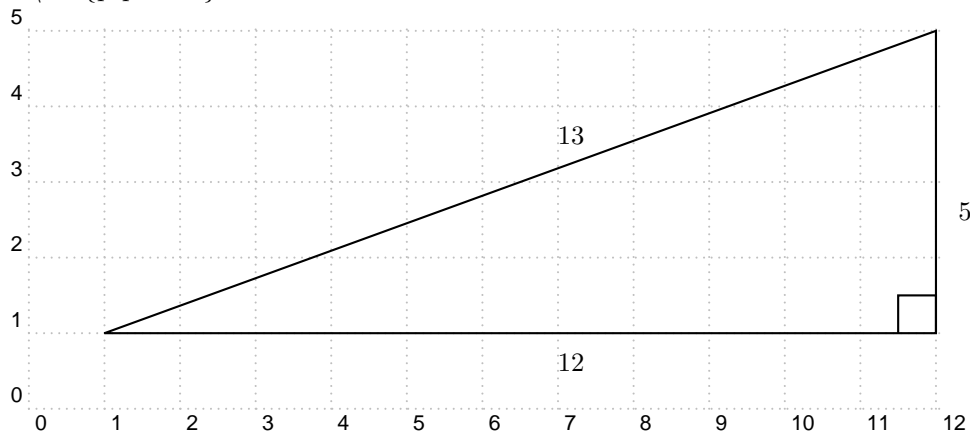{| − |} is for a line with two sides as {|} shape.

2   Homework Exercises from the book

2.1   Pythagorean Triangle

\begin{pspicture}[showgrid](12,5)
\psline(1,1)(12,1)(12,5)(1,1) − − − − − − − − − − − − − − > Triangle
\psline(11.5,1)(11.5,1.5)(12,1.5)(12,1)− − − − − − − − − > 90 degree angle
\put(7,.5){12}
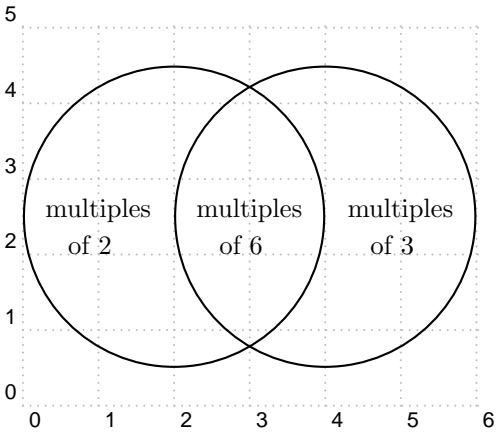\put(12.3,2.5{5}
\put(7,3.5){13}
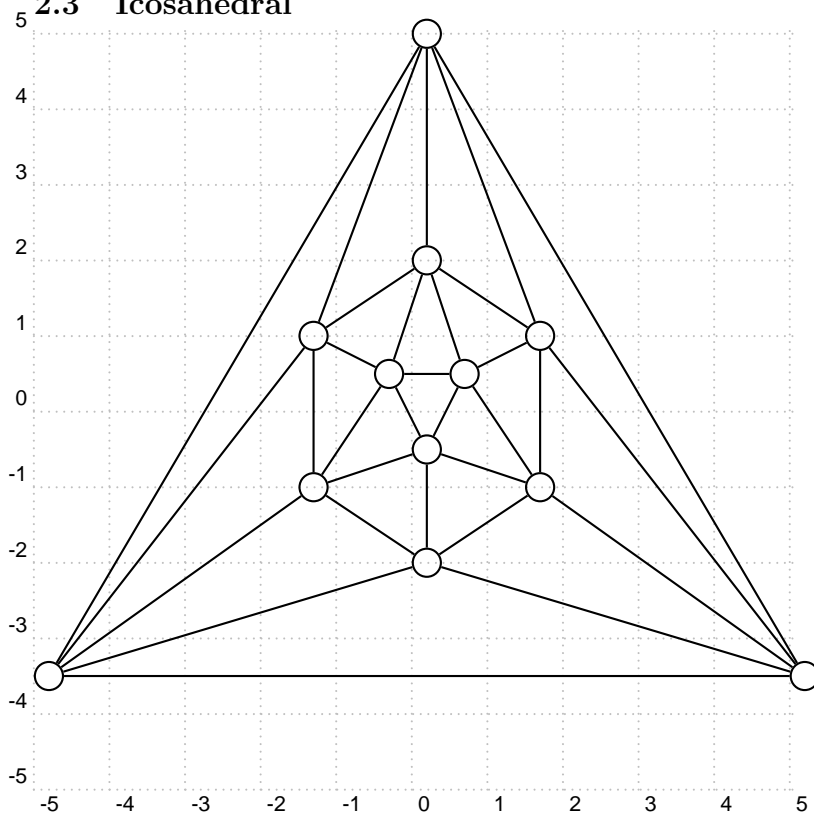\end{pspicture}

2.2   Venn Diagram

```
\begin{pspicture}(6,5)
\pscircle(2,2.5){2}
\pscircle(4,2.5){2}
\put(.3,2.5){multiples}
\put(.6,2){of 2}
\put(2.3,2.5){multiples}
\put(2.6,2){of 6}
\put(4.3,2.5){multiples}
\put(4.6,2){of 3}
\end{pspicture}
```
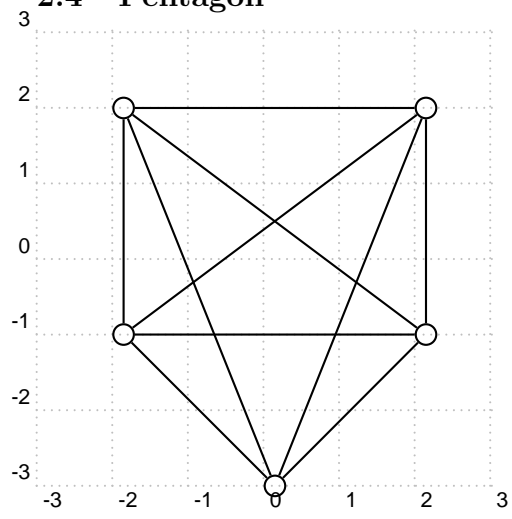

2.3   Icosahedral

'\Circlenode' is easy way to draw lines between any points on a grid.
1. Size your 'dot' by using '\psset{radius=0.2}' by changing radius.
2. Use '\put' and plot any point on the grid.
3. Use'\ncline' and connect two points with a line.

2.4 Pentagon

THANK YOU!