

pst-venn

A PSTricks package for drawing Venn sets; v 0.01

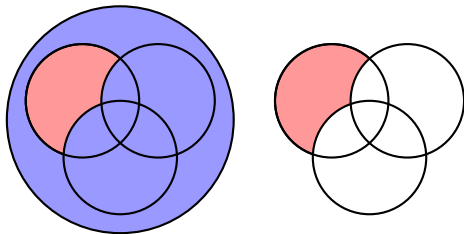
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`\psVenn[options](01)(02)(03){radius}{segments}`

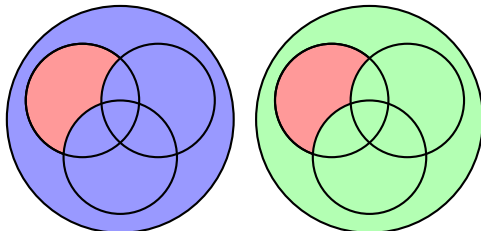
There are the following optional arguments:

`bgcircle=<true/false>`:



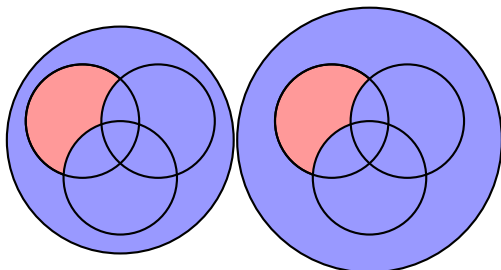
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn[bgcircle](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn[bgcircle=false](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

`bgcolor=<color>`:



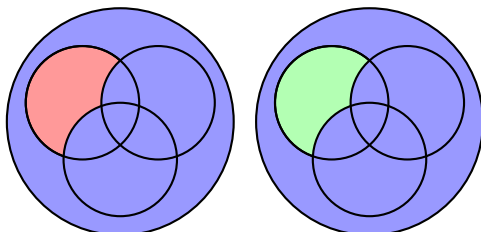
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn[bgcolor=green!30](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

`bgradius=<value[unit]>`:



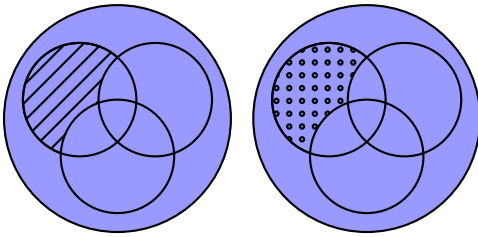
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn[bgradius=3.5](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

`fgcolor=<color>`:



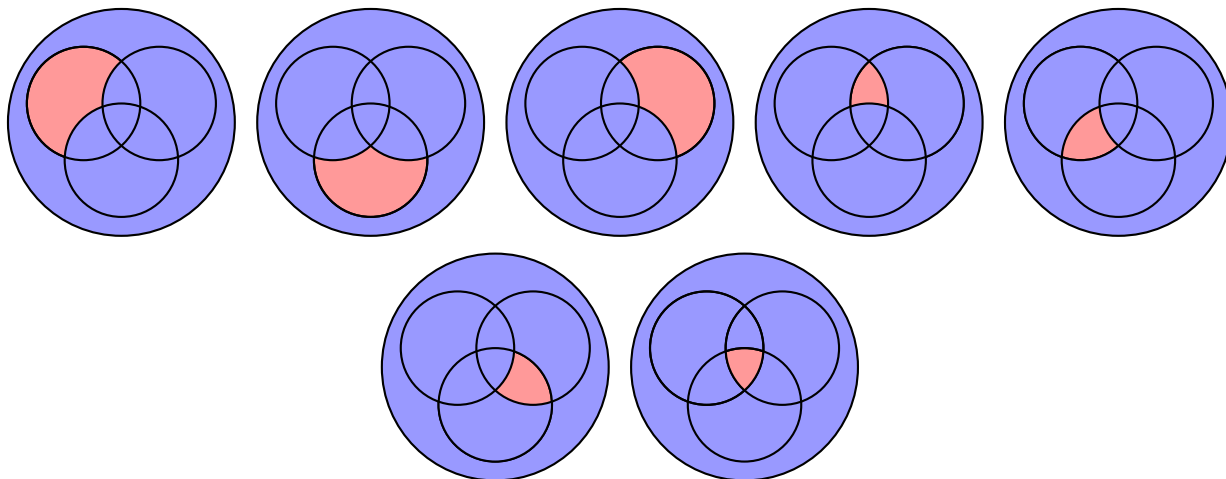
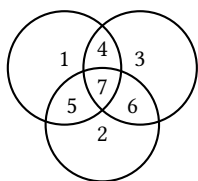
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn[fgcolor=green!30](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

vennfill=<style>:



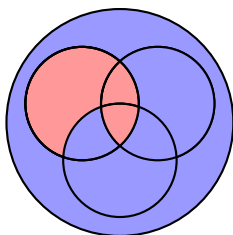
```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn[vennfill=hlines](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn[vennfill=dots](-1,0.5)(0,-1)(1,0.5){1.5}{1}
\end{pspicture}
```

Every single area of the three circles has a number:

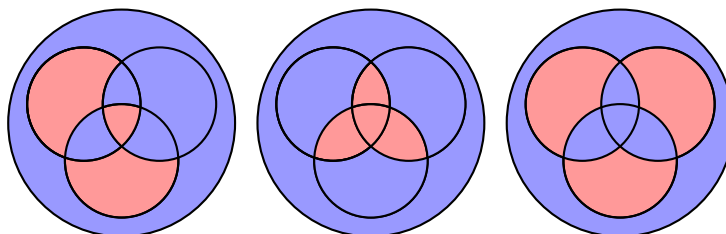


```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{1} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{2} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{3} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{4} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{5} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{6} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{7} \end{pspicture}
```

The elements can be combined like 147:



```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2)
\psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{147}
\end{pspicture}
```



```
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{127} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{4567} \end{pspicture}
\begin{pspicture}(-3.2,-3.2)(3.2,3.2) \psVenn(-1,0.5)(0,-1)(1,0.5){1.5}{123} \end{pspicture}
```

References

- [1] Denis Girou. “Présentation de PSTricks”. in *Cahier GUTenberg*: 16 (**april** 1994), **pages** 21–70.
- [2] Michel Goossens **and** others. *The L^AT_EX Graphics Companion*. second. Boston, Mass.: Addison-Wesley Publishing Company, 2007.
- [3] Nikolai G. Kollock. *PostScript richtig eingesetzt: vom Konzept zum praktischen Einsatz*. Vaterstetten: IWT, 1989.
- [4] Edward Reingold **and** John Tilford. “Tidier Drawings of Trees”. in *IEEE Transactions on Software Engineering*: SE-7.2 (1981).
- [5] Herbert Voß. *PSTricks – Grafik für T_EX und L^AT_EX*. fifth. Heidelberg/Hamburg: DANTE – lehmanns media, 2010.
- [6] Herbert Voß. *PSTricks – Graphics for L^AT_EX*. 1. Cambridge: UIT, 2011.
- [7] Timothy Van Zandt. *multido.tex - a loop macro, that supports fixed-point addition*. [CTAN:/macros/generic/multido.tex](http://ctan.org/macros/generic/multido.tex), 1997.
- [8] Timothy Van Zandt **and** Denis Girou. “Inside PSTricks”. in *TUGboat*: 15 (**september** 1994), **pages** 239–246.