

1 Environments

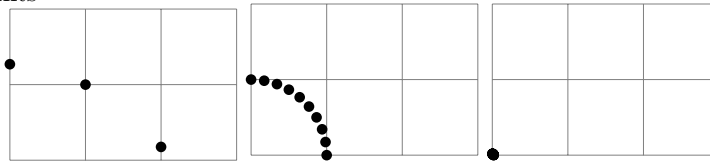
Rectangles \square and \square . Inline \bigcirc . Hello

2 Scopes

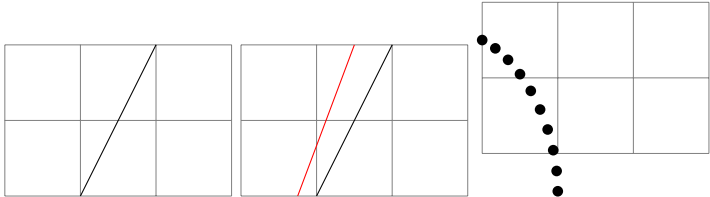
$\square\square\square$

3 Coordinates

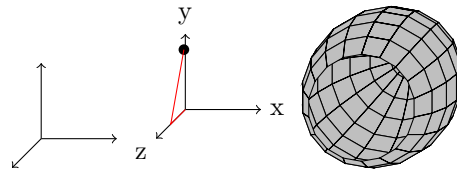
Points



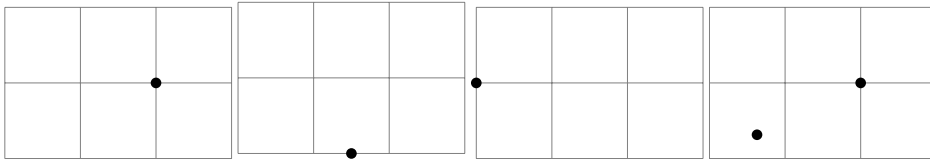
2d coordinates



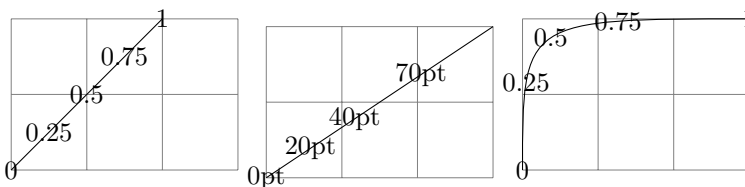
3d coordinates



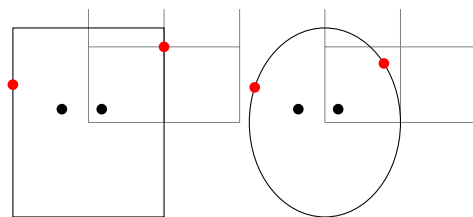
Basic manipulation of coordinates



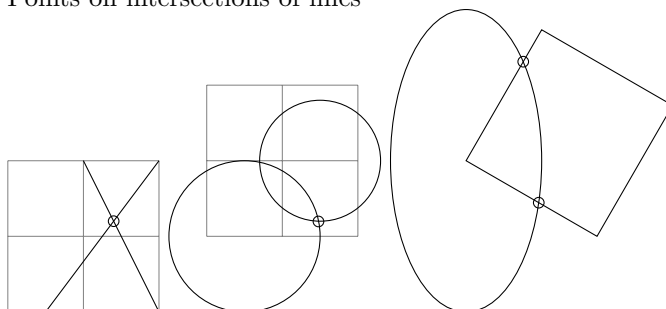
Points along lines and curves
1.25



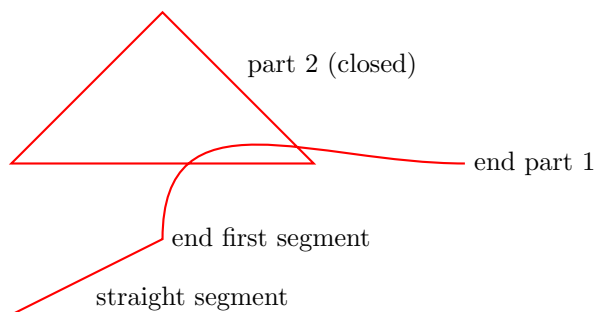
Points on borders of objects



Points on intersections of lines



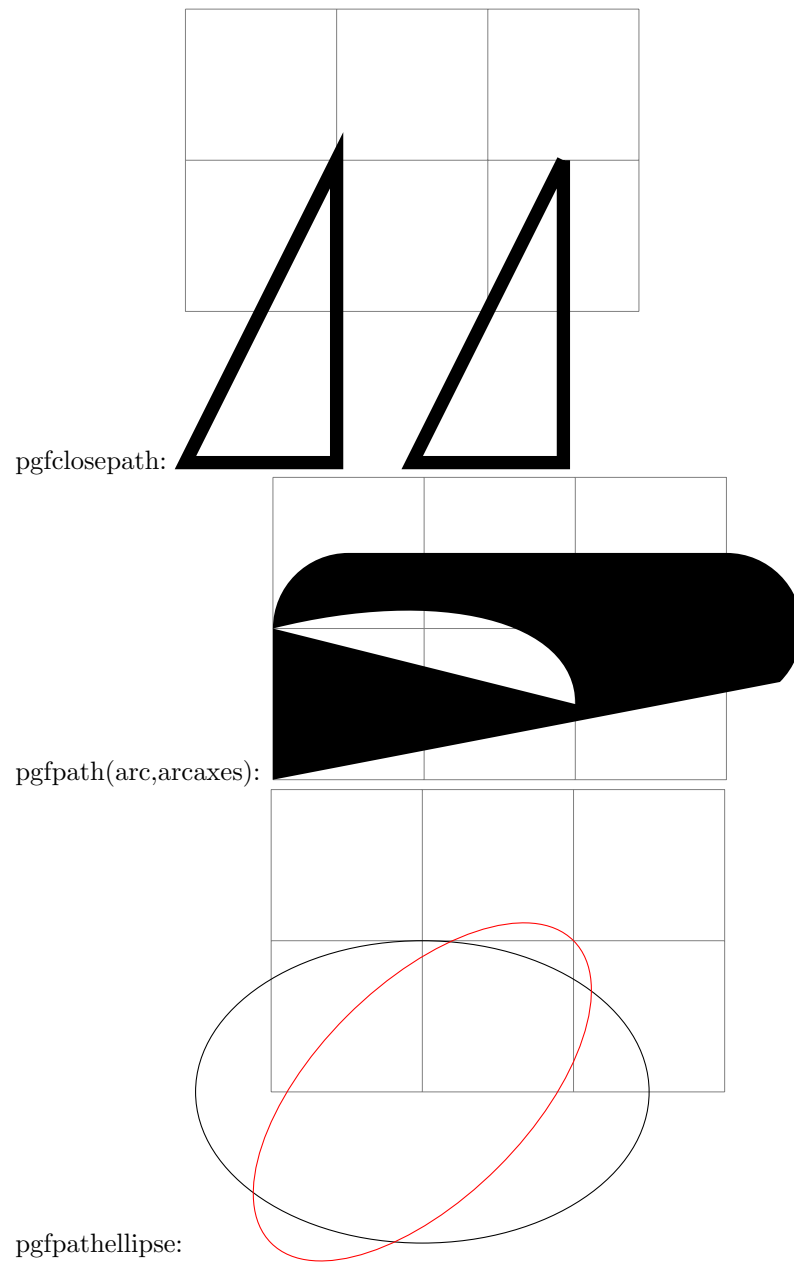
4 Paths

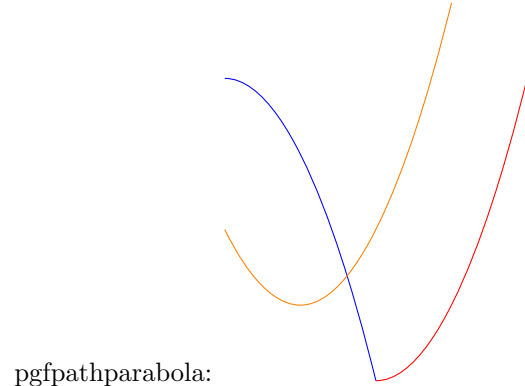
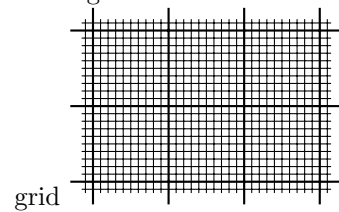
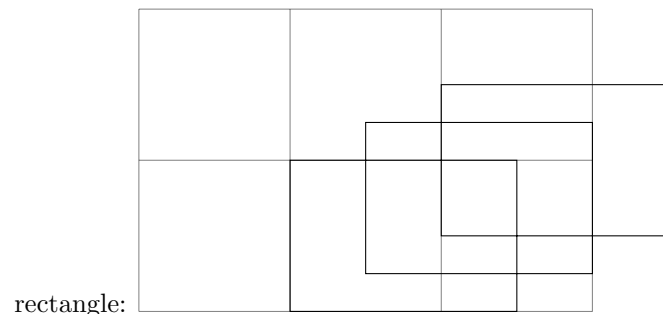


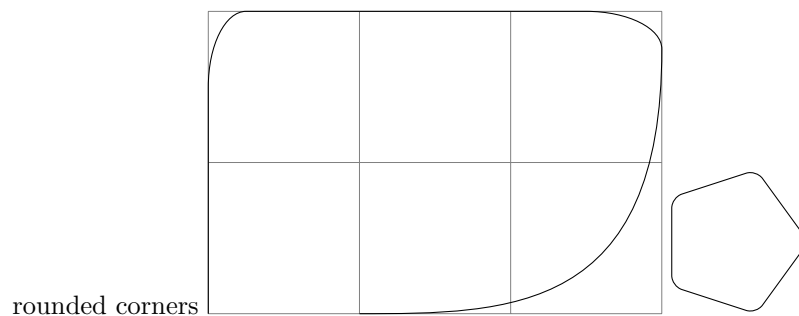
General: start part 1

pgfpath(moveto,lineto,curveto):

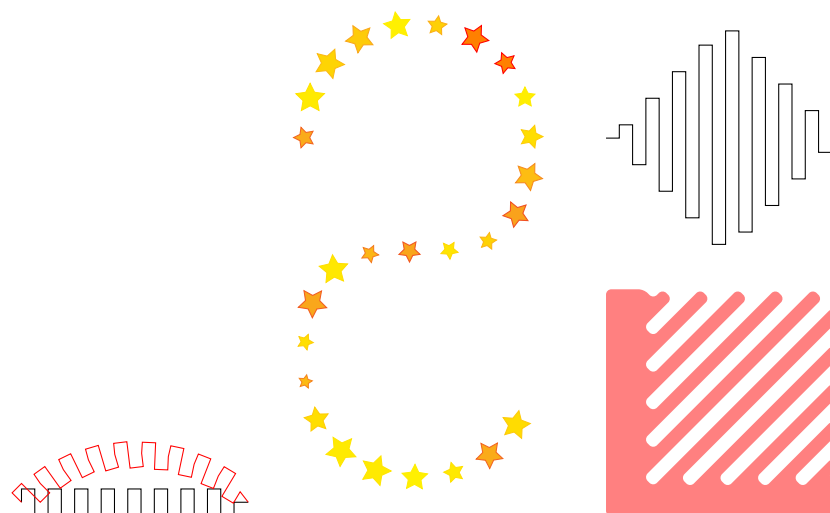




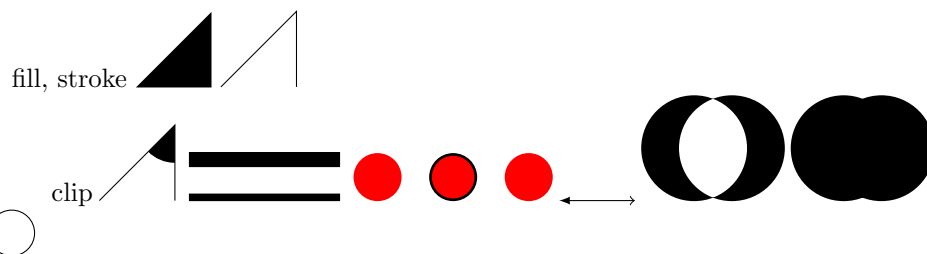




5 Decorations

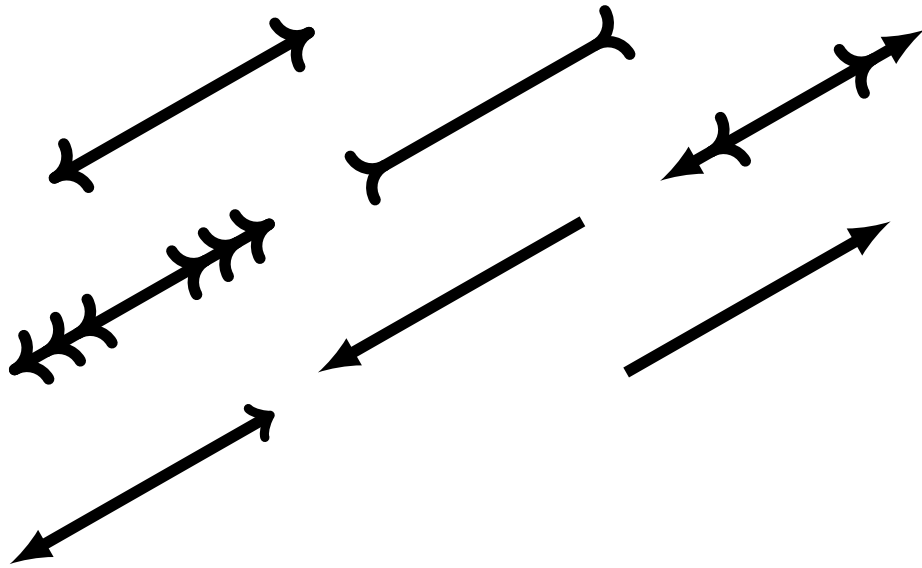


6 More Paths



7 Arrows

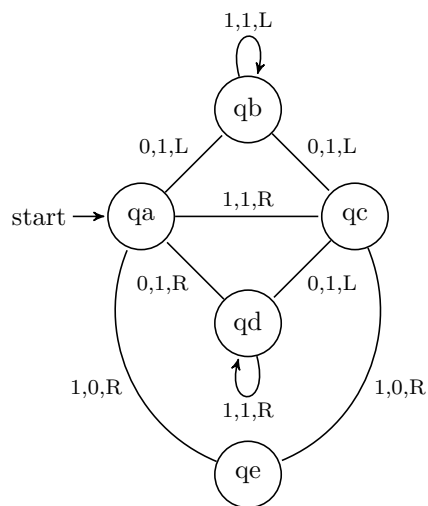




8 Nodes

Remark

Use Case



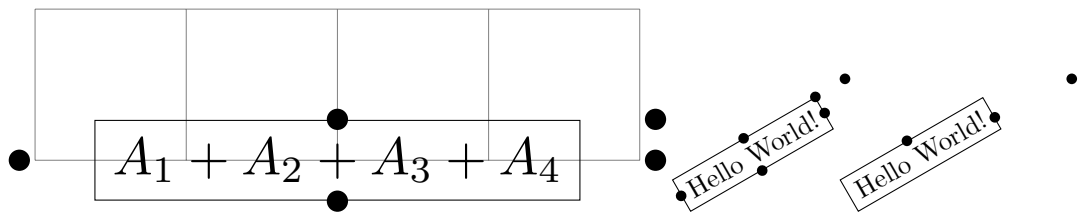
More: $\int e^{-x} dx$

MathML: $\sum_{i=1}^{10} t_i$

$$\int_0^{\infty} e^{-x} dx$$

$$\frac{q}{01}$$

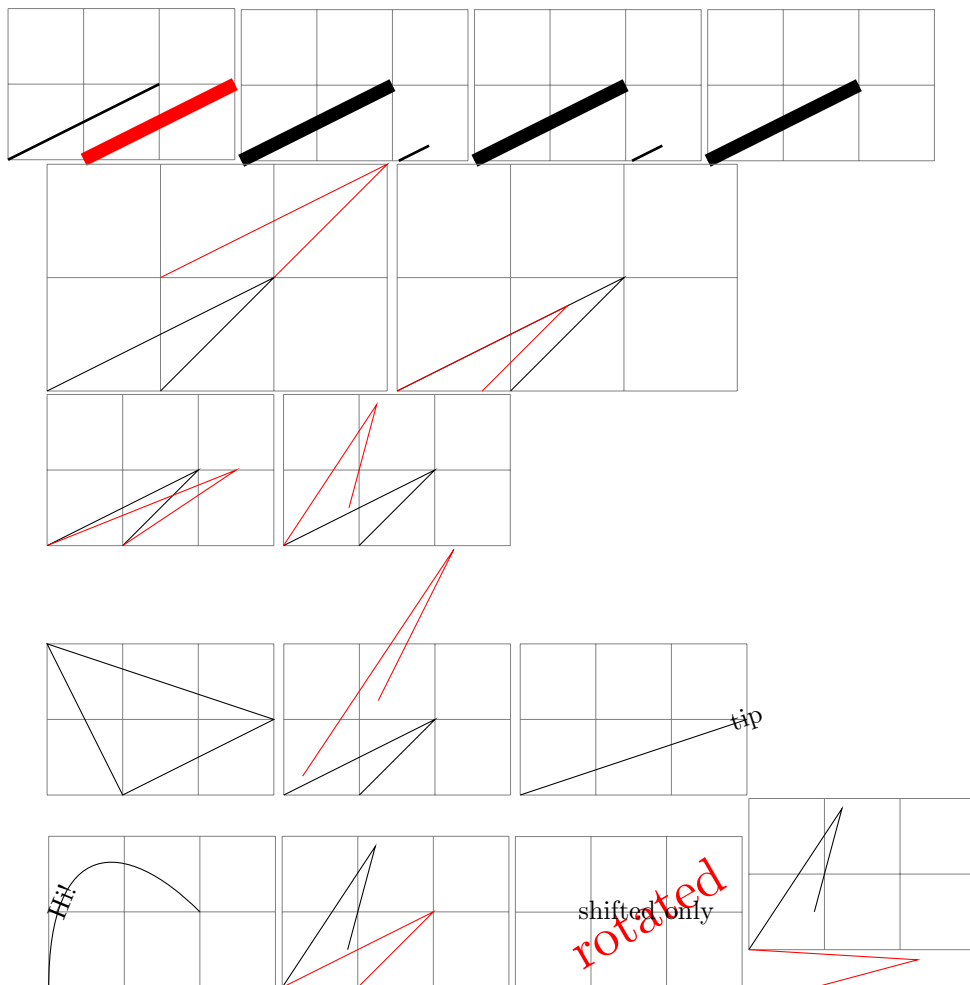
$$\int y dx$$



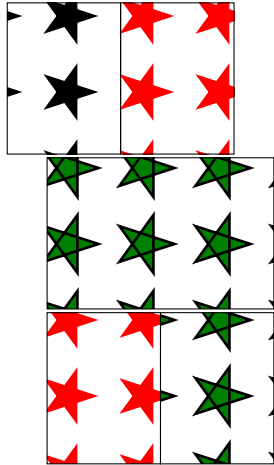
9 Matrices

a

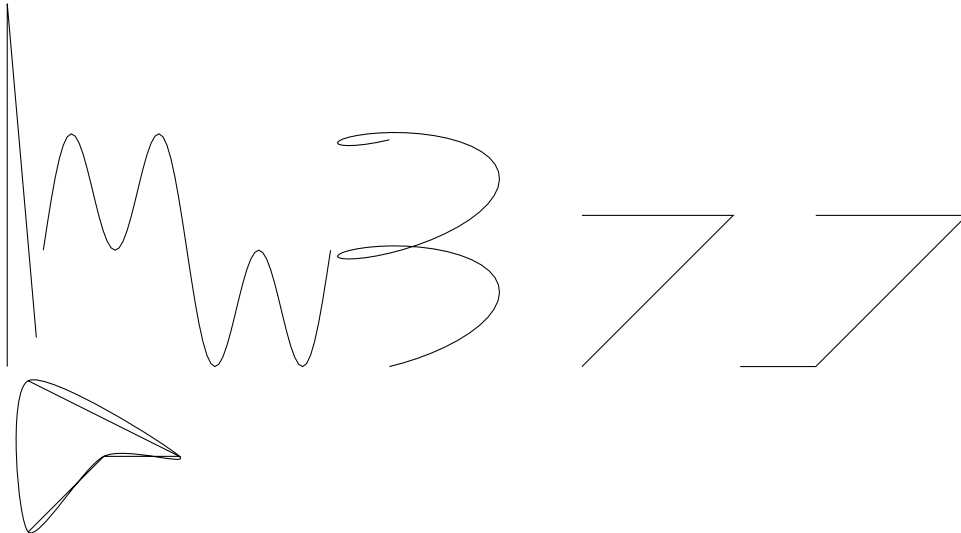
10 Transformations



11 Patterns



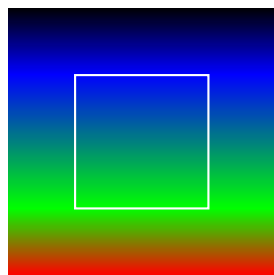
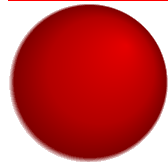
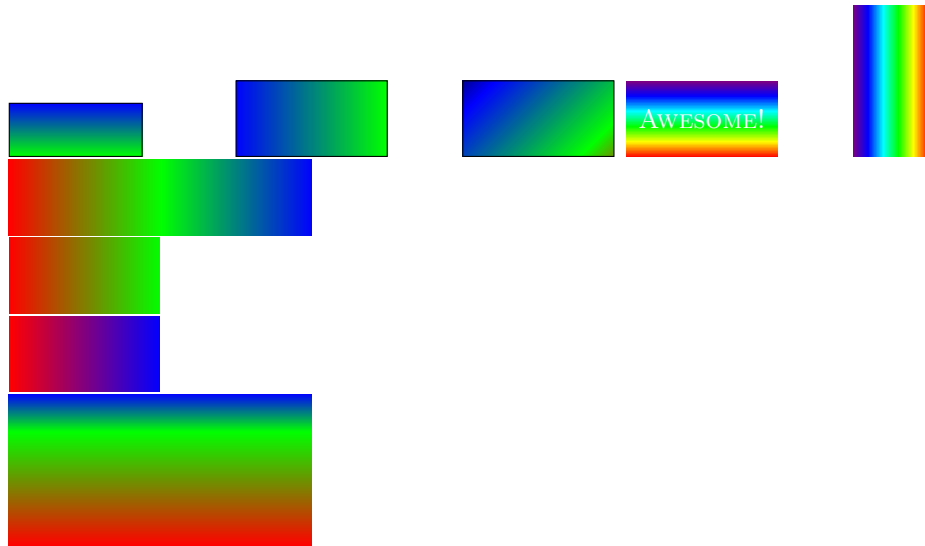
12 Plots



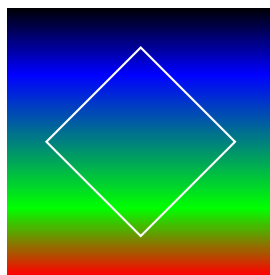
13 Layers



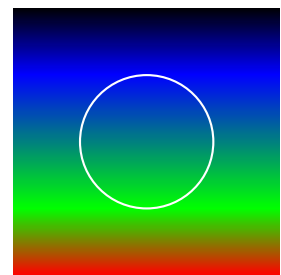
14 Shadings



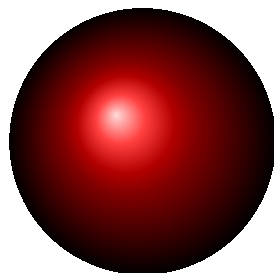
first two applications

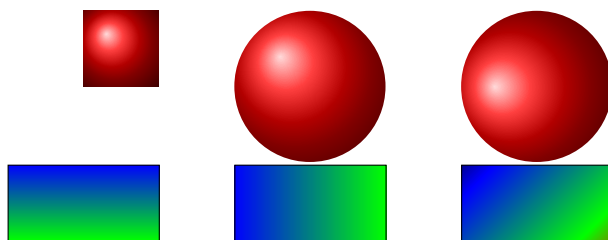


third application

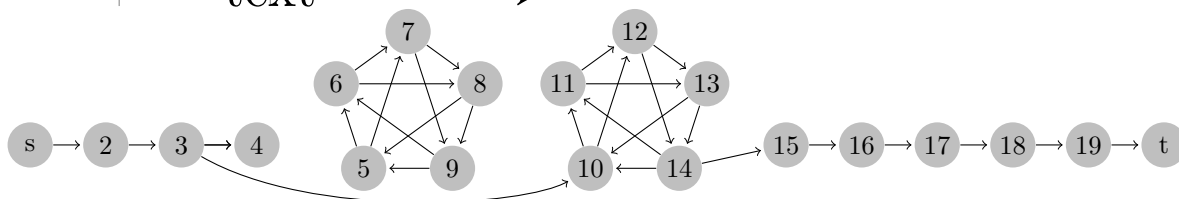
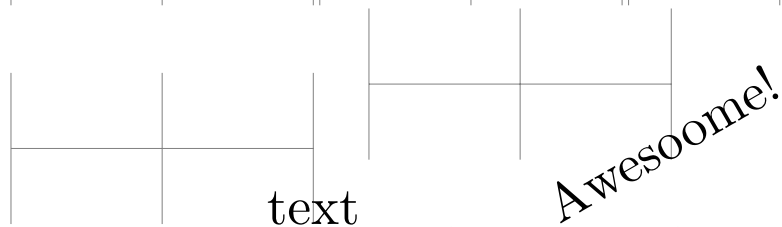
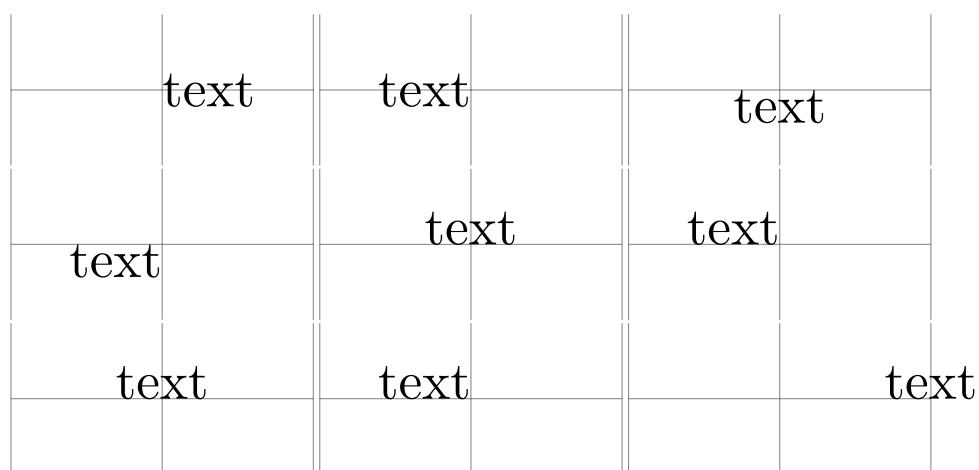


fourth application

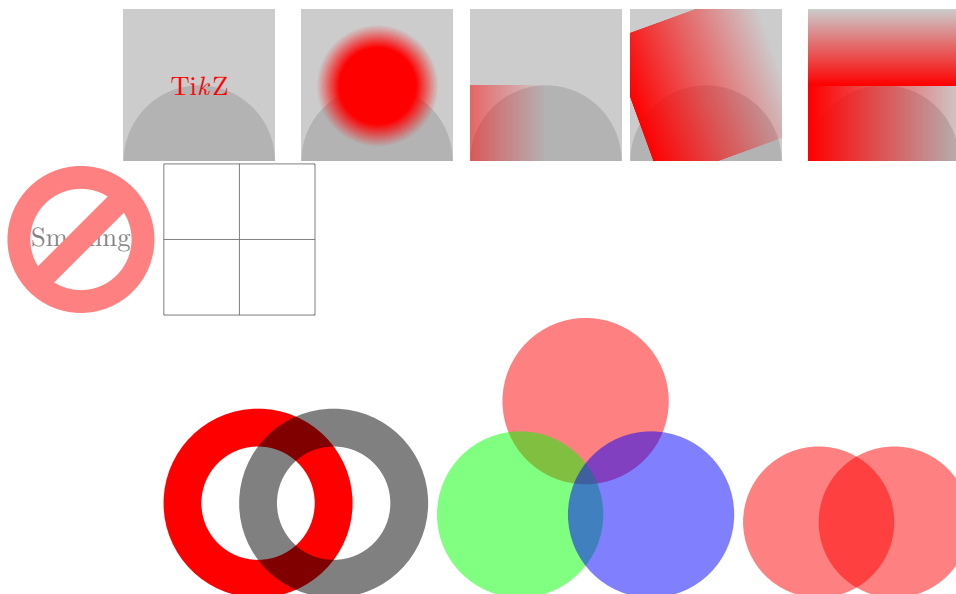




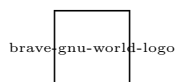
15 Text



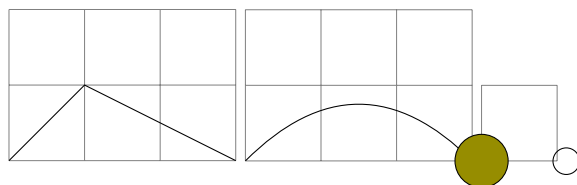
16 Transparency



17 Images



18 Quick Commands



19 Fun Patterns

