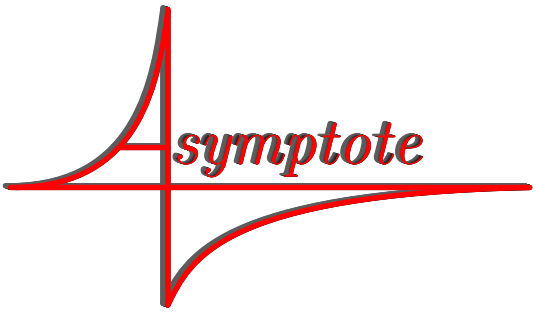
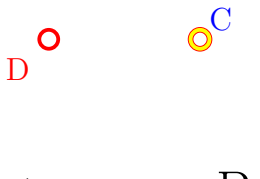
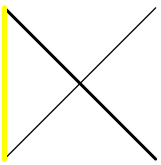
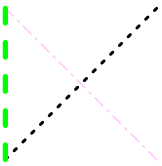




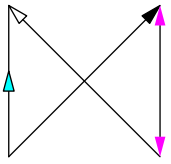

```
unitsize(x=2cm,y=2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
dot(A); dot(B,linewidth(2mm));
dot(C,yellow+0.5mm,FillDraw(white,red+0.75mm));
dot(D,red+0.5mm,UnFill());
label("A",A,left);
label("B",B,right,fontsize(20pt));
label("C",C,right+up,blue);
label("D",D,2*(down+left),red);
```



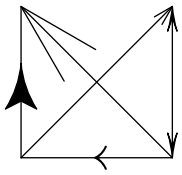
```
unitsize(2cm); // to isté ako unitsize(x=2cm,y=2cm)
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara1, ciara2, ciara3;
ciara1=A--C; ciara2=B--D; ciara3=A--D;
draw(ciara1);draw(ciara2,linewidth(0.4mm));
draw(ciara3,yellow+0.7mm);
```



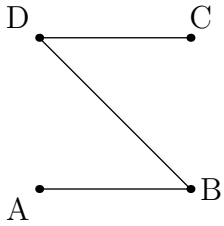
```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara1, ciara2, ciara3;
ciara1=A--C; ciara2=B--D; ciara3=A--D;
draw(ciara1,linetype("1 3")+0.4mm);
draw(ciara2,linetype("8 4 2 4")+pink);
draw(ciara3,linetype("3 4")+green+0.7mm);
```



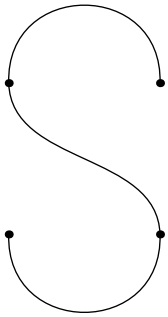
```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara1, ciara2, ciara3, ciara4;
ciara1=A--C; ciara2=B--D; ciara3=A--D; ciara4=B--C;
draw(ciara1,Arrow());
draw(ciara2,Arrow(filltype=NoFill));
draw(ciara3,MidArrow(filltype=FillDraw(cyan)));
draw(ciara4,Arrows(filltype=Fill(magenta)));
```



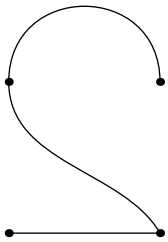
```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara1, ciara2, ciara3, ciara4, ciara5;
ciara1=A--C; ciara2=B--D; ciara3=A--D;
ciara4=B--C; ciara5=B--A;
draw(ciara1,Arrow(SimpleHead));
draw(ciara2,Arrow(SimpleHead,size=11mm));
draw(ciara3,MidArrow(HookHead,size=5mm));
draw(ciara4,Arrows(HookHead(barb=5),size=1.5mm));
draw(ciara5,MidArrow(TeXHead,size=0.75mm));
```



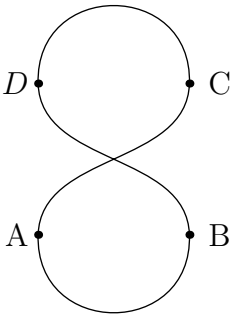

```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara;
ciara=A--B--D--C;
draw(ciara);
dot(ciara);
label("A",A,left+down);
label("B",B,right);
label("C",C,0.5*right+up);
label("D",D,left+up);
```



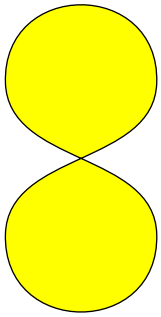
```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara;
ciara=A..B..D..C;
draw(ciara);
dot(ciara);
```



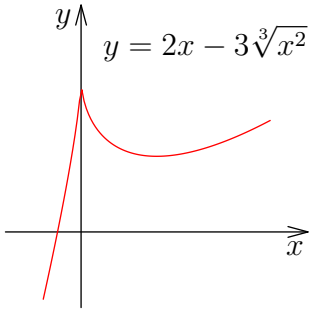
```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara;
ciara=A--B{dir(120)}..{dir(90)}D..C;
draw(ciara);
dot(ciara);
```



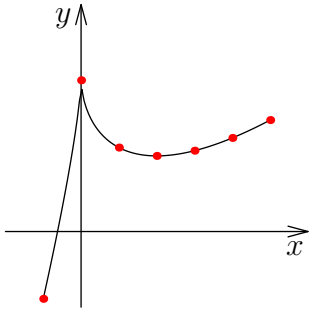

```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara;
ciara=A..B..D..C..cycle;
draw(ciara);
dot(ciara);
label("A",A,left); //t.j. label("A",A,(-1,0));
label("B",B,2*right);
label("C",C,(2,0));
label("$D$",D,left);
```



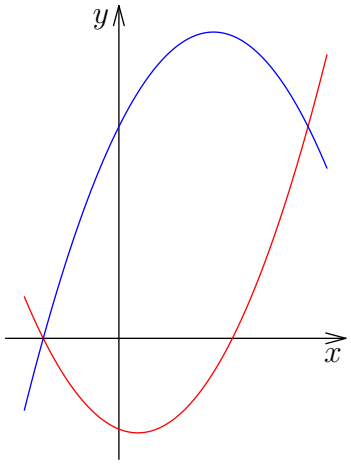
```
unitsize(2cm);
pair A, B, C, D;
A=(0,0); B=(1,0); C=(1,1); D=(0,1);
path ciara;
ciara=A..B..D..C..cycle;
filldraw(ciara,yellow,black);
```



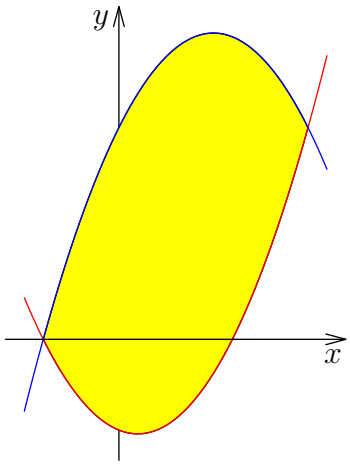

```
import graph;
unitsize(1cm);
real f(real x){return 2*x-3*cbrt(x^2)+2;}
draw(graph(f,-0.5,2.5,n=100),red);
xaxis("$x$",-1,3,Arrow(SimpleHead));
yaxis("$y$",-1,3,Arrow(SimpleHead));
label("$y=2x-3\root3\of{x^2}+2$",(2,2.5));
```



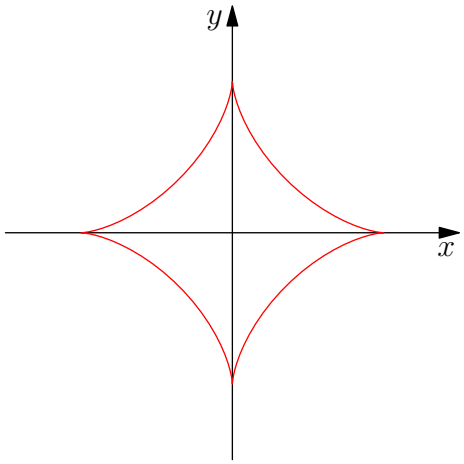

```
import graph;
unitsize(1cm);
real f(real x){return 2*x-3*(x^2)^(1/3)+2;}
draw(graph(f,-0.5,2.5,n=100));
dot(graph(f,-0.5,2.5,n=6),red);
xaxis("$x$",-1,3,Arrow(SimpleHead));
yaxis("$y$",-1,3,Arrow(SimpleHead));
```



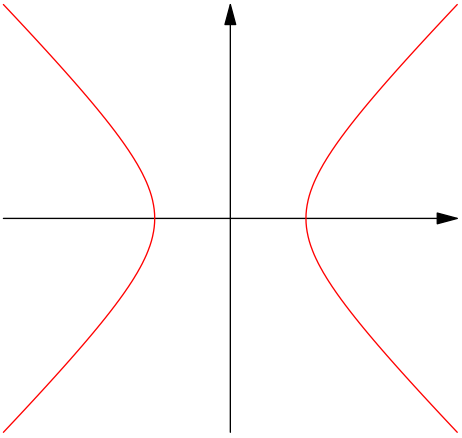

```
import graph;
unitsize(x=5mm,y=2mm);
real f(real x){return x^2-x-6;}
real g(real x){return 14-x^2+5*x;}
draw(graph(f,-2.5,5.5),red);
draw(graph(g,-2.5,5.5),blue);
xaxis("$x$",-3,6,Arrow(SimpleHead));
yaxis("$y$",-8,22,Arrow(SimpleHead));
```



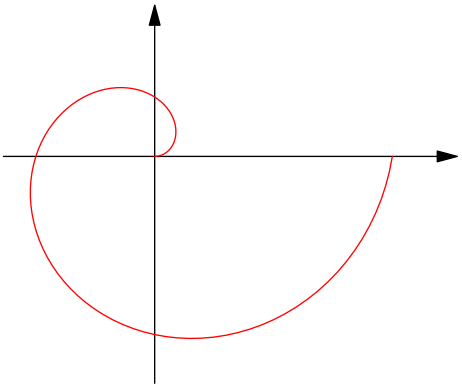

```
import graph;
unitsize(x=5mm,y=2mm);
real f(real x){return x^2-x-6;}
real g(real x){return 14-x^2+5*x;}
filldraw(graph(f,-2,5)--graph(g,5,-2)
                        --cycle,yellow);
draw(graph(f,-2.5,5.5),red);
draw(graph(g,-2.5,5.5),blue);
xaxis("$x$",-3,6,Arrow(SimpleHead),above=true);
yaxis("$y$",-8,22,Arrow(SimpleHead));
```



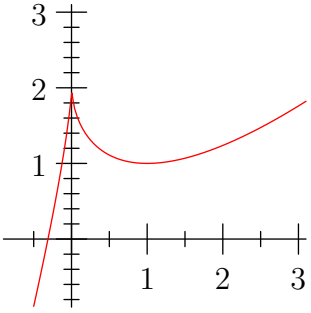

```
import graph;
unitsize(2cm);
real x(real t){return cos(t)^3;}
real y(real t){return sin(t)^3;}
draw(graph(x,y,0,2 pi),red);
xaxis("$x$",-1.5,1.5,Arrow);
yaxis("$y$",-1.5,1.5,Arrow);
```



```
import contour;
import graph;
unitsize(1cm);
real f(real x,real y){return x^2-y^2-1;}
draw(contour(f,(-3,-3),(3,3),
new real[]{0},join=operator..),
red);
xaxis(Arrow);
yaxis(Arrow);
```

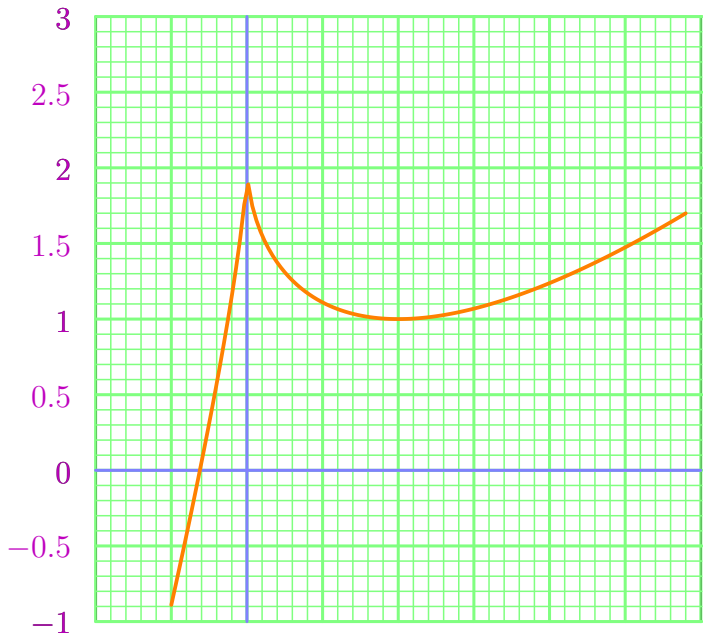


```
import graph;
unitsize(5mm);
real r(real phi){return phi;}
draw(polargraph(r,0,2*pi),red);
xaxis(-4,8,Arrow);
yaxis(-6,4,Arrow);
pair polarpoint(real r,real phi)
{return(r*cos(phi),r*sin(phi));}
```

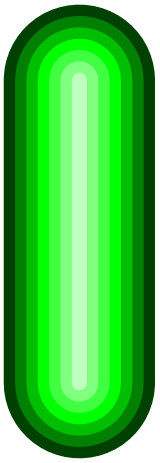



```
import graph;
unitsize(1cm);
real f(real x)
{return 2*x-3*(x^2)^(1/3)+2;}
draw(graph(f,-0.5,3.1,n=100),red);
xaxis(-0.9,3.1,Ticks(beginlabel=false,n=2));
yaxis(-0.9,3.1,Ticks(beginlabel=false,n=5));
```

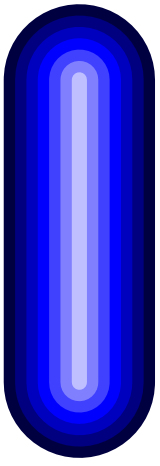
```
import graph;
unitsize(20mm);
draw(left--3right,lightblue+0.4mm); //draw((-1,0)--(3,0),lightblue+0.4mm);
draw(down--3up,lightblue+0.4mm); //draw((0,-1)--(0,3),lightblue+0.4mm);
real f(real x){return 2*x-3*(x^2)^(1/3)+2;}
draw(graph(f,-0.5,2.9,n=127),orange+0.5mm);
xlimits(-1,3); ylimits(-1,3);
yaxis(LeftRight,lightgreen,Ticks(Step=0.5,pTick=lightgreen+0.4mm,
 extend=true,Label(heavymagenta)));
yaxis(LeftRight,Ticks(step=0.1,ptick=lightgreen+0.2mm,extend=true));
xaxis(BottomTop,lightgreen,Ticks(format="%",Step=0.5,step=0.1,
 pTick=lightgreen+0.4mm,ptick=lightgreen+0.2mm,extend=true));
```



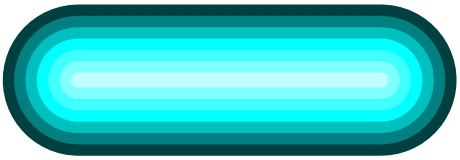
```
unitsize(2cm);
draw(left--right,darkbrown+20mm);
draw(left--right,brown+17mm);
draw(left--right,heavyred+14mm);
draw(left--right,red+11mm);
draw(left--right,mediumred+8mm);
draw(left--right,lightred+5mm);
draw(left--right,palered+2mm);
```



```
unitsize(2cm);
draw(up--down,darkgreen+20mm);
draw(up--down,deepgreen+17mm);
draw(up--down,heavygreen+14mm);
draw(up--down,green+11mm);
draw(up--down,mediumgreen+8mm);
draw(up--down,lightgreen+5mm);
draw(up--down,palegreen+2mm);
```



```
unitsize(2cm);
draw(N--S,darkblue+20mm);
draw(N--S,deepblue+17mm);
draw(N--S,heavyblue+14mm);
draw(N--S,blue+11mm);
draw(N--S,mediumblue+8mm);
draw(N--S,lightblue+5mm);
draw(N--S,paleblue+2mm);
```



```
unitsize(2cm);
draw(left--right,darkcyan+20mm);
draw(left--right,deepcyan+17mm);
draw(left--right,heavycyan+14mm);
draw(left--right,cyan+11mm);
draw(left--right,mediumcyan+8mm);
draw(left--right,lightcyan+5mm);
draw(left--right,palecyan+2mm);
```

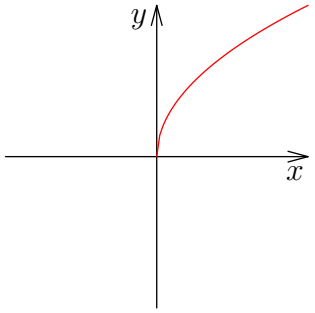
```
unitsize(2cm);
draw(left--right,darkmagenta+20mm);
draw(left--right,deepmagenta+17mm);
draw(left--right,heavymagenta+14mm);
draw(left--right,magenta+11mm);
draw(left--right,mediummagenta+8mm);
draw(left--right,lightmagenta+5mm);
draw(left--right,pink+2mm);
```

```
unitsize(2cm);
draw(W--E,darkolive+20mm);
draw(W--E,olive+17mm);
draw(W--E,lightolive+14mm);
draw(W--E,yellow+11mm);
draw(W--E,mediumyellow+8mm);
draw(W--E,lightyellow+5mm);
draw(W--E,paleyellow+2mm);
```

```
unitsize(2cm);
draw(W--E,darkgray+20mm);
draw(W--E,deepgray+17mm);
draw(W--E,heavygray+14mm);
draw(W--E,gray+11mm);
draw(W--E,mediumgray+8mm);
draw(W--E,lightgray+5mm);
draw(W--E,palegray+2mm);
```

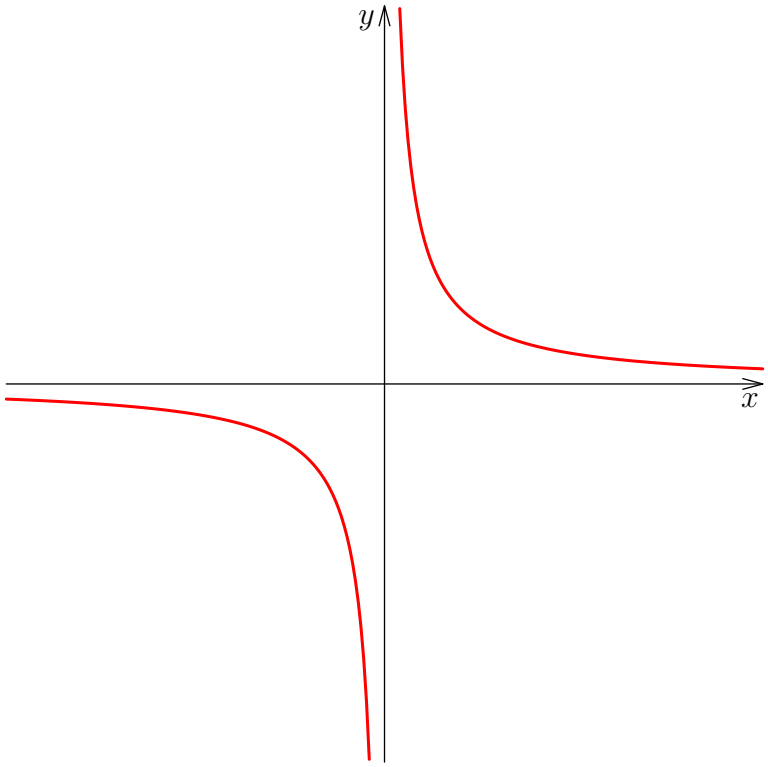
Ďalšie príklady:

http://marris.org/asymptote/
http://www.piprime.fr/asymptote/

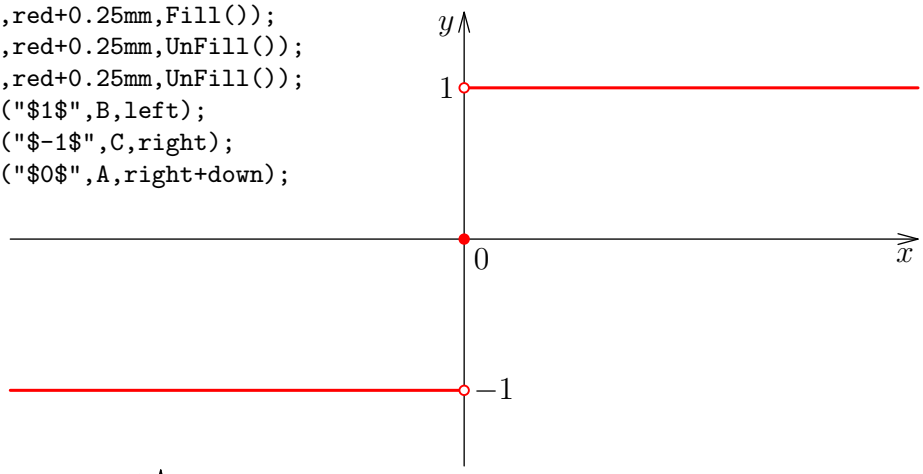


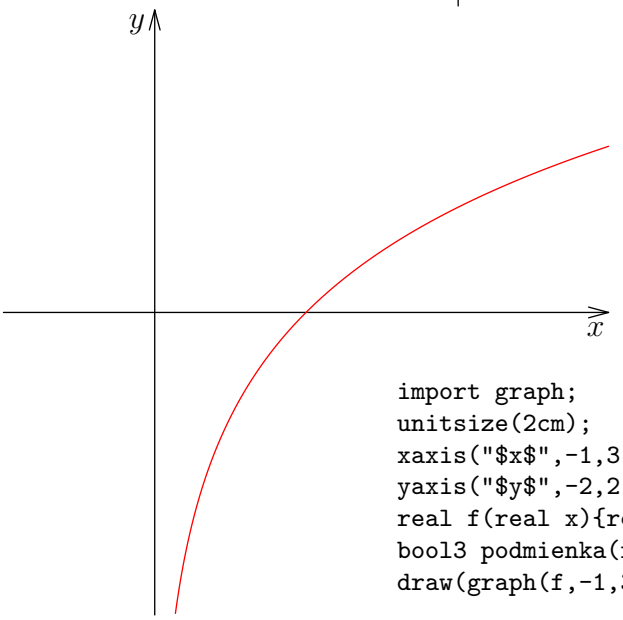

```
import graph;
unitsize(2cm);
xaxis("$x$",-1,1,Arrow(SimpleHead));
yaxis("$y$",-1,1,Arrow(SimpleHead));
real f(real x){return sqrt(x);}
bool3 nezaporne(real x){return(x>=0);}
draw(graph(f,-1,1,nezaporne),red);
```

```
import graph;
unitsize(1cm);
xaxis("$x$",-5,5,Arrow(SimpleHead));
yaxis("$y$",-5,5,Arrow(SimpleHead));
real f(real x){return 1/x;}
bool3 podmienka(real x){if (abs(x)>=1/5) return true;return false;}
draw(graph(f,-5,5,n=273,podmienka),red+0.4mm);
```



```
import graph;
unitsize(2cm);
xaxis("$x$",-3,3,Arrow(SimpleHead));
yaxis("$y$",-1.5,1.5,Arrow(SimpleHead));
real f(real x){return sgn(x);}
bool3 kladne(real x){return(x>0);}
bool3 zaporne(real x){return(x<0);}
draw(graph(f,-3,3,n=101,kladne),red+0.4mm);
draw(graph(f,-3,3,n=101,zaporne),red+0.4mm);
pair A, B, C;
A=(0,0); B=(0,1); C=(0,-1);
dot(A,red+0.25mm,Fill());
dot(B,red+0.25mm,UnFill());
dot(C,red+0.25mm,UnFill());
label("$1$",B,left);
label("$-1$",C,right);
label("$0$",A,right+down);
```






```
import graph;
unitsize(2cm);
xaxis("$x$",-1,3,Arrow(SimpleHead));
yaxis("$y$",-2,2,Arrow(SimpleHead));
real f(real x){return log(x);}
bool3 podmienka(real x){return (f(x)>=-2);}
draw(graph(f,-1,3,n=1024,podmienka),red);
```