**Лабораторная работа 11-12.**

**0)**

**uses** graphABC;  
**begin**setpencolor(clBlack);  
moveto(10, 10);  
lineto(100, 10);  
lineto(100, 100);  
lineto(10, 100);  
lineto(10, 10);  
setpencolor(clOlive);  
moveto(300, 10);  
lineto(360, 100);  
lineto(240, 100);  
lineto(300, 10);  
**end.**

**1)**

**uses** graphABC;

**begin**

moveto(100,100);

lineto(280,100);

lineto(190,40);

lineto(100,100);

lineto(190,160);

lineto(280,100);

circle(70,100,30);

circle(310,100,30);

floodfill(70,100,clred);

floodfill(310,100,clyellow);

floodfill(190,60,clblue);

floodfill(190,150,cllime);

**end**.

**2)**

**uses** graphABC;

**begin**

line(250,300,450,300);

line(450,300,500,140);

line(500,140,390,260);

circle(500,140,20);

floodfill(510,130, cllime);

line(250,300,200,140);

line(200,140,310,260);

circle(200,140,20);

floodfill(200,140,clblue);

moveto(300,300);

lineto(350,100);

lineto(400,300);

circle(350,100,20);

floodfill(350,100,clred);

floodfill(350,290,clred);

floodfill(450,280, cllime);

floodfill(250,290,clblue);

**end**.

**3)**

**uses** graphabc;

**begin**

**var** x:=50;

**repeat**

circle(x,100,10);

floodfill(x,100,rgb(random(256), random(256), random(256)));

x:=x+30;

**until** x>290;

**end**.

**4)**

**uses** graphabc;

**begin**

**var** x:=200;

**repeat**

circle(250,250,x);

x:=x-20;

**until** x<10;

**end**.

**5)**

**uses** graphabc;

**begin**

**var** x, y, z, w : integer;

x:=50;

y:=20;

z:=10;

w:=1;

**repeat**

circle(x,y,z);

floodfill(x,y,rgb(random(256), random(256), random(256)));

x:=x+60;

y:=y+40;

z:=z+10;

w:=w+1;

**until** w>8;

**end**.

**6)**

**uses** Graphabc;

**begin**

rectangle(50,50,450,450); // рамка

setbrushcolor(clbrown); // цвет заливки

Rectangle(100,50,150,100);

Rectangle(200,50,250,100);

Rectangle(300,50,350,100);

Rectangle(400,50,450,100);

Rectangle(50,100,100,150);

Rectangle(150,100,200,150);

Rectangle(250,100,300,150);

Rectangle(350,100,400,150);

Rectangle(100,150,150,200);

Rectangle(200,150,250,200);

Rectangle(300,150,350,200);

Rectangle(400,150,450,200);

Rectangle(50,200,100,250);

Rectangle(150,200,200,250);

Rectangle(250,200,300,250);

Rectangle(350,200,400,250);

Rectangle(100,250,150,300);

Rectangle(200,250,250,300);

Rectangle(300,250,350,300);

Rectangle(400,250,450,300);

Rectangle(50,300,100,350);

Rectangle(150,300,200,350);

Rectangle(250,300,300,350);

Rectangle(350,300,400,350);

Rectangle(100,350,150,400);

Rectangle(200,350,250,400);

Rectangle(300,350,350,400);

Rectangle(400,350,450,400);

Rectangle(50,400,100,450);

Rectangle(150,400,200,450);

Rectangle(250,400,300,450);

Rectangle(350,400,400,450);

**end**.

**7)**

**uses** graphabc;

**var** a,x1,x2,x3,y1,y2:integer;

**procedure** trk;

**begin**

line(x1,y1,x2,y2);

line(x2,y2,x3,y1);

**end**;

**procedure** square(x,y:integer);

**begin**

setbrushcolor(clBlack);

rectangle(x-a,y-a,x+a,y+a);

**end**;

**var** x,y:integer;

**begin**

setwindowsize(400,400);

centerwindow;

a:=20;

x1:=a;

x2:=windowwidth **div** 2;

x3:=windowwidth-a;

y1:=windowheight-a;

y2:=a;

trk;

lockdrawing;

x:=x1;

y:=y1;

**while** x<=x2 **do**

**begin**

clearwindow;

trk;

square(x,y);

sleep(20);

x:=x+1;

y:=y-2;

redraw;

**end**;

**while** x<=x3 **do**

**begin**

clearwindow;

trk;

square(x,y);

sleep(20);

x:=x+1;

y:=y+2;

redraw;

**end**;

**end**.