

```
%circle11
%420a
x1=10; y1=15; r1=7;
xcoor1=linspace(x1-r1, x1+r1, 100);
yy=sqrt(r1^2-(x1-xcoor1).^2 );
ycoor1=abs(yy)+y1;
ycoor2=-abs(yy)+y1;
plot(xcoor1,ycoor1,xcoor1,ycoor2)
axis([0 30 -0 30])
```

```
%func circle
function qq=func_circle1(x1,y1,r1);
xcoor1=linspace(x1-r1, x1+r1, 200);
yy=sqrt(r1^2-(x1-xcoor1).^2 );
ycoor1=abs(yy)+y1;
ycoor2=-abs(yy)+y1;
plot(xcoor1,ycoor1,xcoor1,ycoor2)
```

```
%circle21
clear all; close all
x1=10; y1=15; r1=7;
func_circle1(x1,y1,r1)
hold on
func_circle1(-10,-20,10)
func_circle1(0,0,10)
func_circle1(10,10,10)
```

```
%circle1
clear all; close all
for x1=10:20:220,
    func_circle1(x1,10,8);
    hold on
end;
axis([-10 300 -10 50])
```

```
%circle31
clear all; close all
for y1=10:20:220,
    func_circle1(10,y1,8);
    hold on
```

```
end;  
axis([ -10 50 -10 300])
```

```
%circle41  
clear all; close all  
for x1=10:30:220,  
    for y1=10:20:220,  
        func_circle1(x1,y1,10);  
    hold on  
end;  
end;  
axis([ -10 300 -10 300])
```

```
%circle51  
clear all; close all  
RR=100;  
for x1=-100:18:100,  
    yy=sqrt(RR^2-x1.^2 );  
    y1=abs(yy);  
    func_circle1(x1,y1,10);  
    hold on  
    func_circle1(x1,-y1,10);  
end;  
axis([ -120 150 -120 150])
```