Задание 10.

function dxdy = U10(x,y)

dxdy=zeros(1,1);

dydx(1)=y\*(y+2);

clc

[T,Y]=ode45('U10',[1.5,5.5],0.4)

plot(T,Y,'r-','LineWidth',3);

title('График функции')

xlabel('x')

ylabel('y')

grid on;

hold on;

Задание 20.

function dxdy = U11(x,y)

dxdy=zeros(1,1);

dydx(1)=(-tan(x))\*tan(x);

clc

[T,Y]=ode45('U11',[0,6.28],0.5234)

plot(T,Y,'g-','LineWidth',3);

title('График функции')

xlabel('x')

ylabel('y')

grid on;

hold on;

Задание 30.

function dxdy = U30(x,y)

dxdy=zeros(1,1);

dydx(1)=1+(x\*exp(y^2));

clc

[T,Y]=ode45('U30',[8,50],0.4)

plot(T,Y,'b-','LineWidth',3);

title('График функции')

xlabel('x')

ylabel('y')

grid on;

hold on;