MATH 245 Simulation Problem #1

Javier Jesús Macossay-Hernández

ODE function file-

function dy = odefun(t,y);

dy = y - ((y.^2)/3);

Main program-

%[t,y] = ode45(@ode function file, tspan, y0)

tspan = [0 6]; %interval of t

y0 = [0.5,1,1.5,2,3,4,5]; %various intial values

%solve ODE

for i = 1:7

[t,y] = ode45(@math245\_simulation\_problem\_one, tspan,y0);

plot(t,y)

hold on

end

%plot results

xlabel('t');

ylabel('y');

grid

Printed graphs-

