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# 7

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clear all; % clears all previous activity
close all;

f = @(p,q,r,L,t,y) (r*(1-(y/L)).*y)-((p*(y.^2))./(q+(y.^2))); %
    defines f(y) as an anonymous function
ylim([0,100])

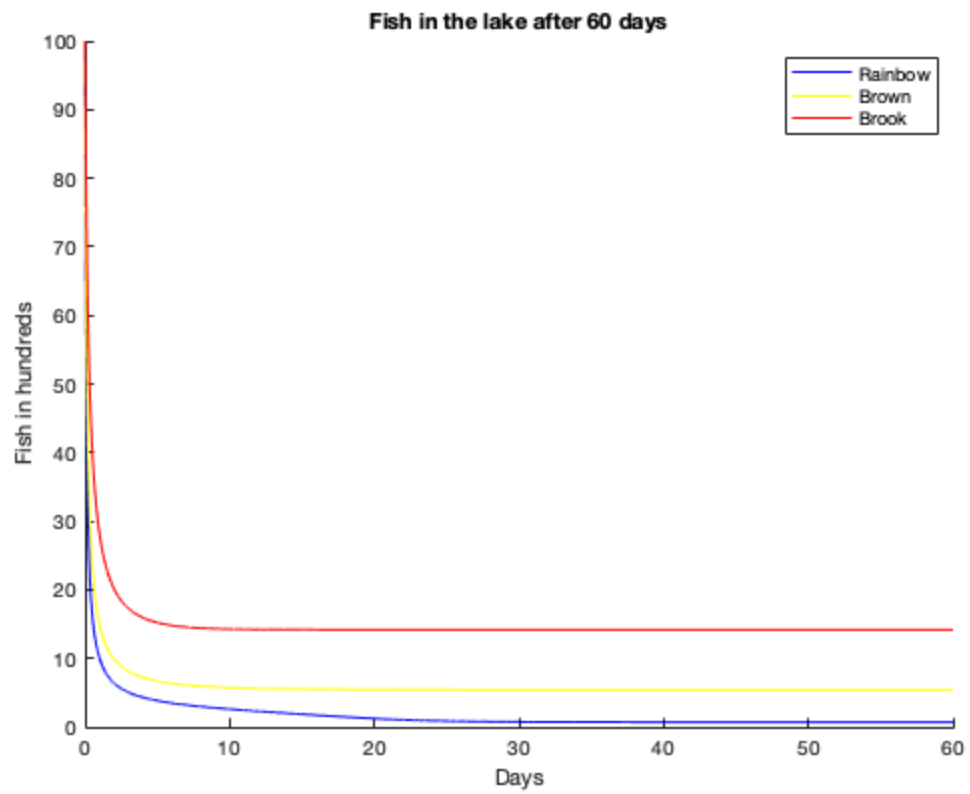
hold on; % allows all plots to be on the same figure
    em(.01,0,100,60,f,5.4,'blue'); % evaluates number of rainbows
    after 60 days and plots curve using euler's method
    em(.01,0,100,60,f,8.1,'yellow'); % evaluates number of browns
    after 60 days and plots curve using euler's method
    em(.01,0,100,60,f,16.3,'red'); % evaluates number of brooks after
    60 days and plots curve using euler's method

    % sets axes labels and title/legend
    xlabel("Days"); % sets x axis label
    ylabel("Fish in hundreds"); % sets y axis label
    legend("Rainbow","Brown","Brook") % defines which curve is which
    title("Fish in the lake after 60 days"); % sets title of the
graph
hold off; % ends graphical hold

0.7051

5.4418

14.1898
```



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