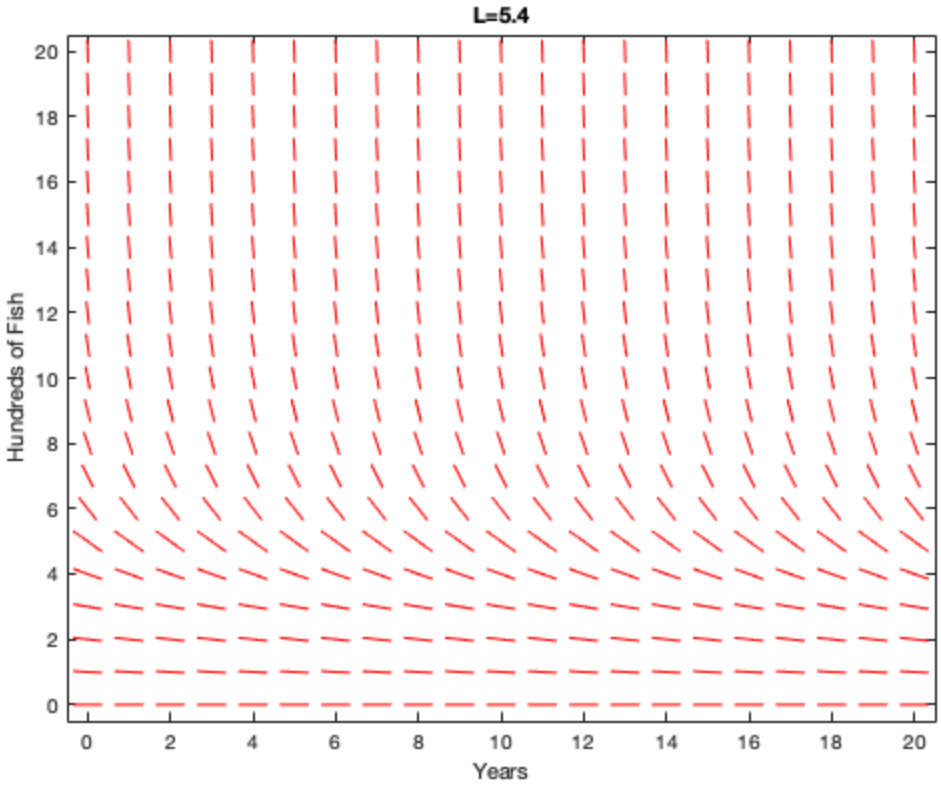
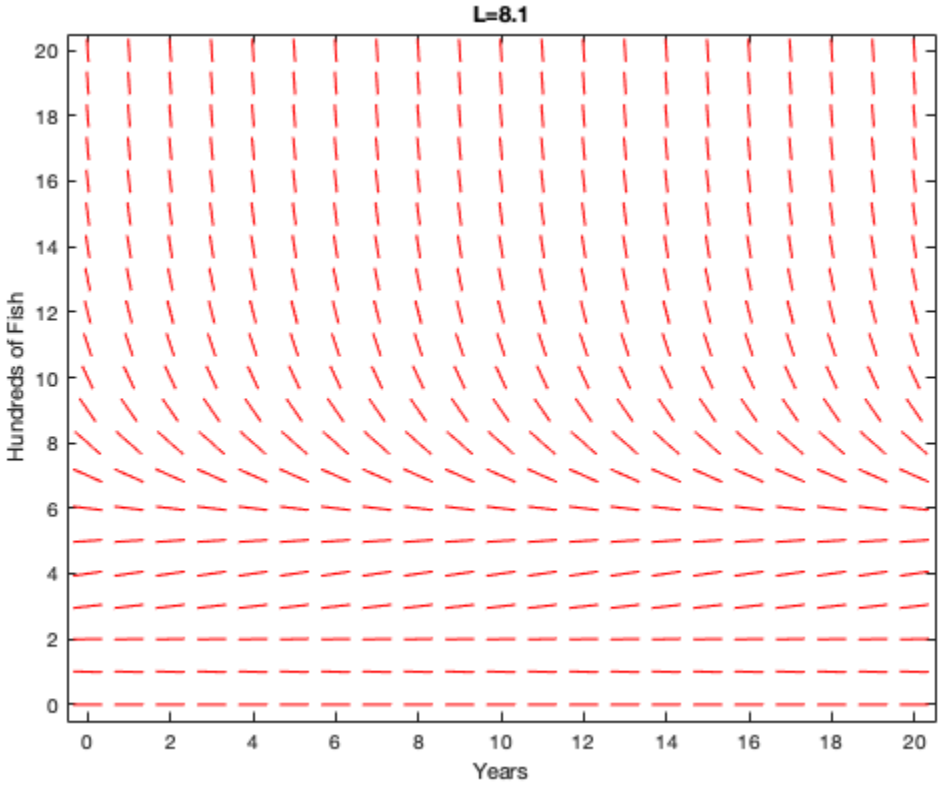
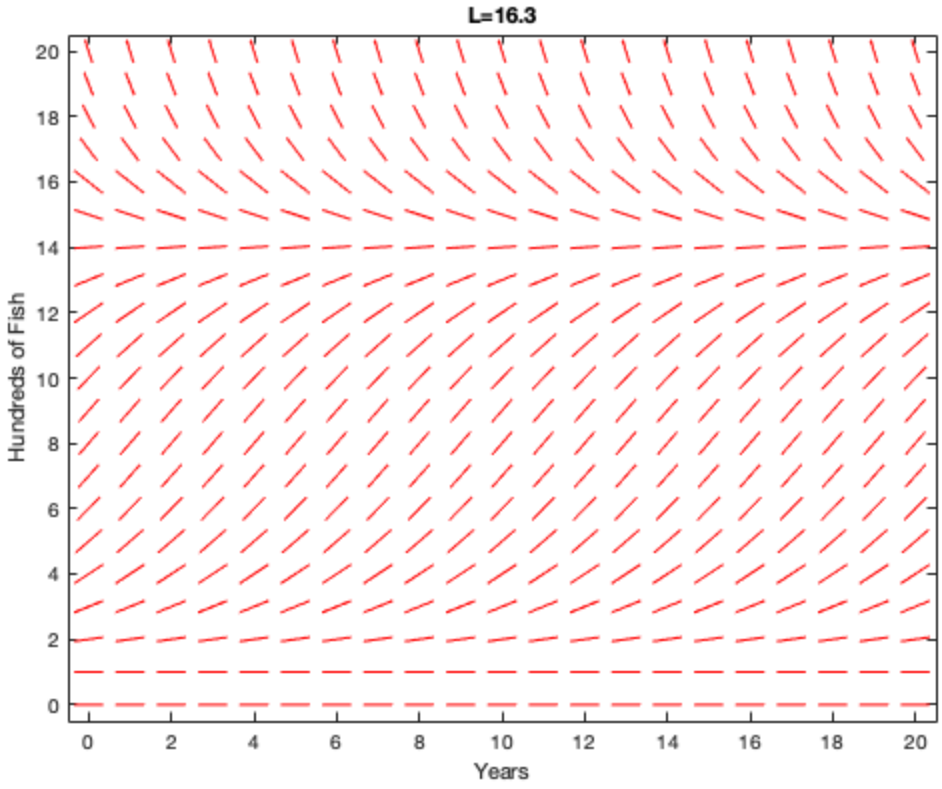
5C

```
clear all;  % clears all previous activity
close all;

% sets global variables
p=1.2
q=1;
r=.65;
L=5.4;

func1 = @(t,y) (.65*(1-(y/5.4)).*y)-((1.2*(y.^2))./(1+(y.^2)));  %
 defines f(y) as an anonymous function with L=5.4
func2 = @(t,y) (.65*(1-(y/8.1)).*y)-((1.2*(y.^2))./(1+(y.^2)));  %
 defines f(y) as an anonymous function with L=8.1
func3 = @(t,y) (.65*(1-(y/16.3)).*y)-((1.2*(y.^2))./(1+(y.^2)));  %
 defines f(y) as an anonymous function with L=16.3

   figure(1);  % sets figure 1
   dirfield(func1, 0:1:20, 0:1:20, "L=5.4")  % graphs direction field
 when L=5.4
     % sets axes labels
   xlabel('Years');
   ylabel('Hundreds of Fish');

   figure(2);  % sets figure 2
   dirfield(func2, 0:1:20, 0:1:20, "L=8.1")  % graphs direction field
 when L=8.1
     % sets axes labels
   xlabel('Years');
   ylabel('Hundreds of Fish');

   figure(3);  % sets figure 3
   dirfield(func3, 0:1:20, 0:1:20, "L=16.3")  % graphs direction field
 when L=16.3
     % sets axes labels
   xlabel('Years');
   ylabel('Hundreds of Fish');


p =

    1.2000
```


L=5.4
Hundreds of Fish
Years
0
2
4
6
8
10
12
14
16
18
20


L=8.1
Hundreds of Fish
Years
0
2
4
6
8
10
12
14
16
18
20



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