

1. Copy-and-paste the following line into your worksheet  
`T:=RT([x],10);SSSg(T,[x]); SSG(T,[x],z);ORB(T,[x],[6.],1000,1010)[-1];`  
 Run it twenty times. Out of these twenty times, how many times did the first and third numbers agree? **The first and third number were the same all 20 times.**
2. Copy-and-paste the following line into your worksheet  
`T:=RT([x,y],10);SSg(T,[x,y]); SSSg(T,[x,y]);ORB(T,[x,y],[6.,8.],1000,1010)[-1];`  
 Run it twenty times. Out of these twenty times, how many times did the first and third numbers agree? **The first and third numbers were the same 14 times. The first 6 in a row did not match.**
3. Copy-and-paste the following line into your worksheet  
`T:=RT([x,y,z],10); SSG(T,[x,y,z]); SSSg(T,[x,y,z]); ORB(T,[x,y,z],[6.,8.,11.],1000,1010)[-1];`  
 Run it twenty times. Out of these twenty times, how many times did the first and third numbers agree? **The first and the third numbers were the same 5 times.**
4. Copy-and-paste the following line into your worksheet  
`f:=RR([z[1],z[2]],10); T:=RecToTs(2,z,f);SSg(T,[z[1],z[2]]); SSSg(T,[z[1],z[2]]);`  
`Orbk(2,z,f,[5.,8.],2000,2010)[-1];`  
**I ran this 10 times because there were no instructions, and the answers were all the same, except that the steady-state values of z[1] and z[2] were always the same.**
5. Copy-and-paste the following line into your worksheet  
`f:=RR([z[1],z[2],z[3]],10); T:=RecToTs(3,z,f);SSg(T,[z[1],z[2],z[3]]);`  
`SSSg(T,[z[1],z[2],z[3]]); Orbk(3,z,f,[5.,8.,11.],2000,2010)[-1];`  
 Run it twenty times. Out of these twenty times, how many times did the last coordinate of the first point and the third numbers agree? **The coordinates agreed for all 20 trials. Except that, the same as the last time, z[1] = z[2] = z[3] was true for each trial.**
6. Copy-and-paste the following line into your worksheet  
`L:=rand(1..3()); a:=rand(1..50())/20.;c:=rand(1..50())/20.; T:=NicholsonBailey(L,a,c,N,P)`  
`;SSg(T,[N,P]);SSSg(T,[N,P]);`  
 Run it twenty times. Out of these twenty times, how many times did you get a non-empty set of stable steady-states? (ignore those that have an error message). **I never found one with a non-empty set of steady-states or an error message.**
7. Copy-and-paste the following line into your worksheet :  
`a:=rand(1..10)/10.; r:=rand(1..10)/10.; K:=rand(1..10());`  
`T:=NicholsonBaileyM(a,r,K,14,N,P); SSSg(T,[N,P]);`  
 Run it 100 times. Out of these fifty times, how many times did you get a non-empty set of stable steady-states? (ignore those that have an error message) **I got a non-empty set of stable steady-states 48 out of 100 times.**