

1. `F(n) is the number of female rabbits born at year n`
 `Initial Conditions: F(0) = c0, F(1) = c1, F(2) = c`
 `F(n) = F(n-1) + F(n-2) + F(n-3)`

2.

```
F := proc(n, p1, p2, p3, c0, c1, c2) option remember;
if n = 0 then
C0;
elif n = 1 then
c1;
elif n = 2 then
c2;
Else
expand(p1*F(n - 1, p1, p2, p3, c0, c1, c2) + p2*F(n - 2, p1, p2, p3, c0, c1, c2) + p3*F(n -
3, p1, p2, p3, c0, c1, c2));
Fi:
end; end proc;
seq(F(i, 0.3, 0.3, 0.4, 1, 1, 1), i = 1000);
```

3. .4, .3, .3 is stagnation and making any number larger causes explosion and making any number smaller causes decay