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=> SFP(f, x)
                                [8.123105626]
=> #Yes there is a steady state at 8.123105625 and it is stable.

```

```

[#2)
=> f := x · (1 - x)
                                f := x (1 - x)

```

```

=> Orb(f, x, 0.5, 1, 1000)
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> $SFP(f, x)$ (16)
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> $f := 3.5 x \cdot (1 - x)$ (17)
 $f := 3.5 x (1 - x)$

> $Orb(f, x, 0.5, 1, 1000)$ (18)
 [0.875, 0.3828125, 0.8269348143, 0.5008976952, 0.8749971794, 0.3828199039,
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> SFP(f, x)

[]

(19)

> #Only when k=2 and k=2.5 will there be a stable fixed point

#3)

$$\begin{aligned}
 > f := \text{rsolve}\left(\left\{x(n) - \frac{x(n-1) + 9x(n-2)}{x(n-1) + 6x(n-2)} = 0, x(0) = 0.5, x(1) = 0.7\right\}, x(n)\right) \\
 & f := \text{rsolve}\left(\left\{x(n) - \frac{x(n-1) + 9x(n-2)}{x(n-1) + 6x(n-2)} = 0, x(0) = 0.5, x(1) = 0.7\right\}, x(n)\right)
 \end{aligned}$$

(20)


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```
> #The steady state is at -1.5 .
```