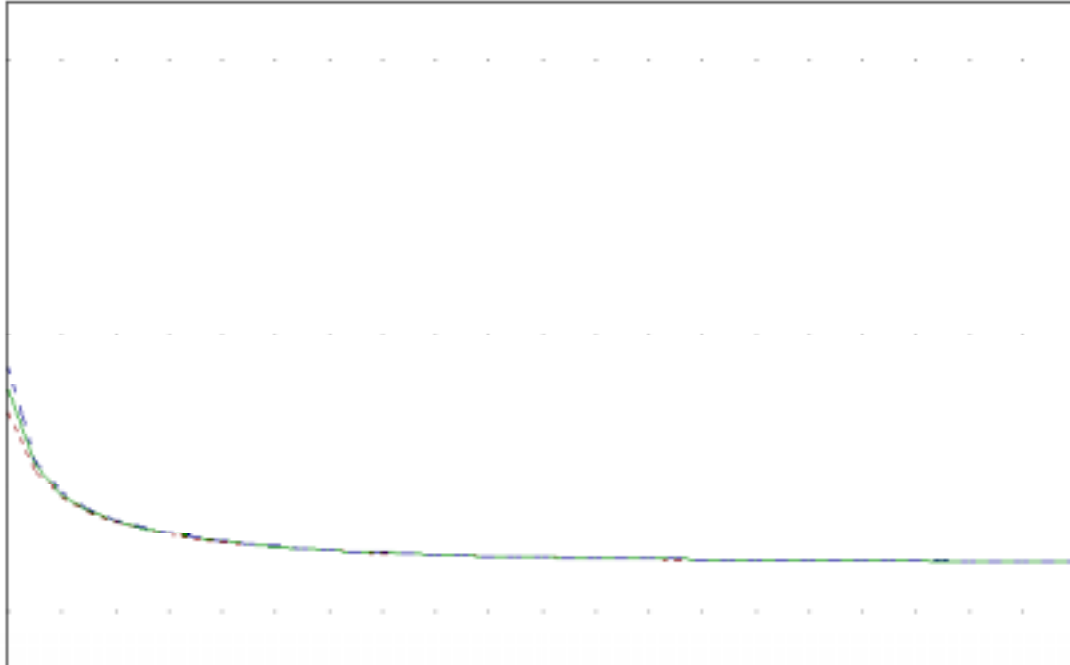


f1. Robert May のカオス



$$x_t = \lambda \times x_{t-1} \times (1 - x_{t-1})$$

When  $\lambda = 1.1$

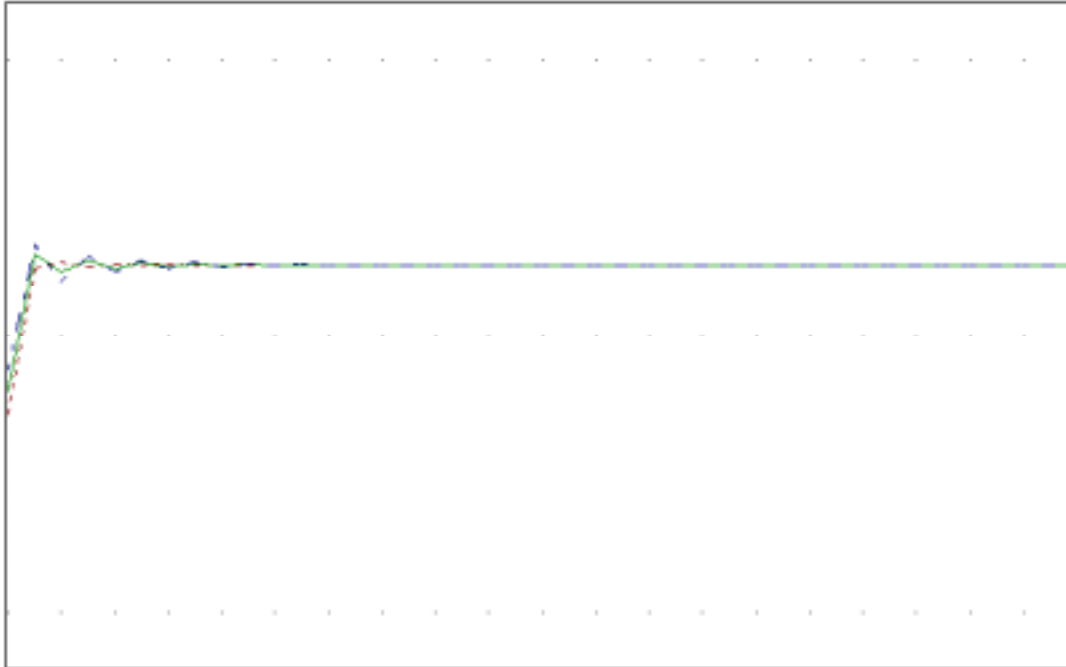
$x_0 = 0.36$  -> red broken line

$x_0 = 0.4$  -> green dotted line

$x_0 = 0.44$  -> blue chain line

Width of x-axis = one hundred generations.

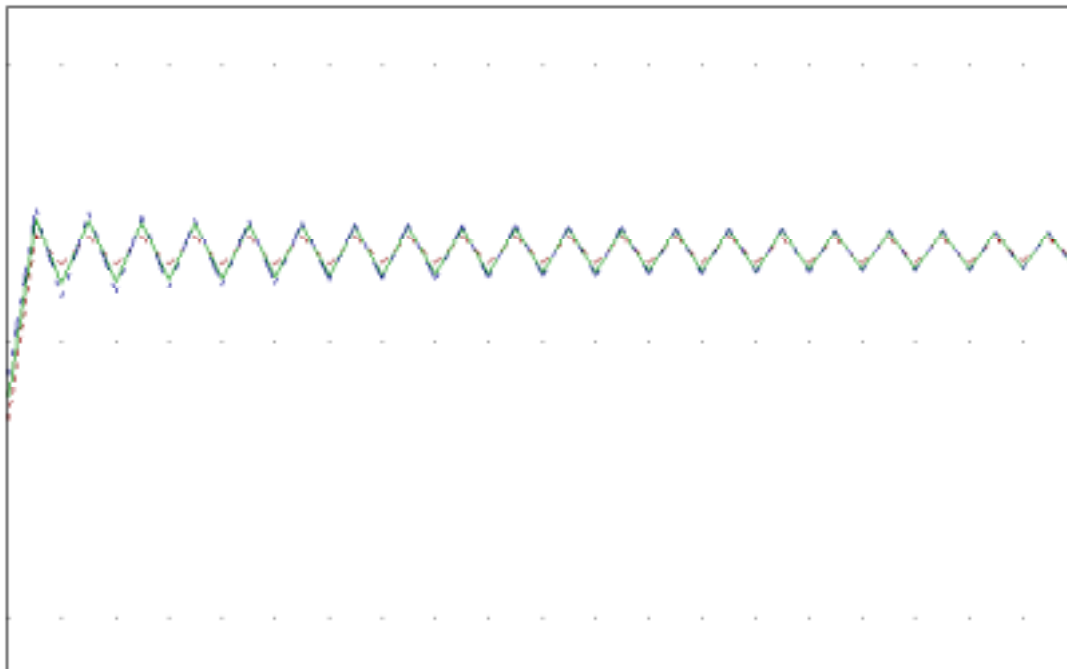
f2. 同



$$x_t = \lambda \times x_{t-1} \times (1 - x_{t-1})$$

When  $\lambda = 2.7$

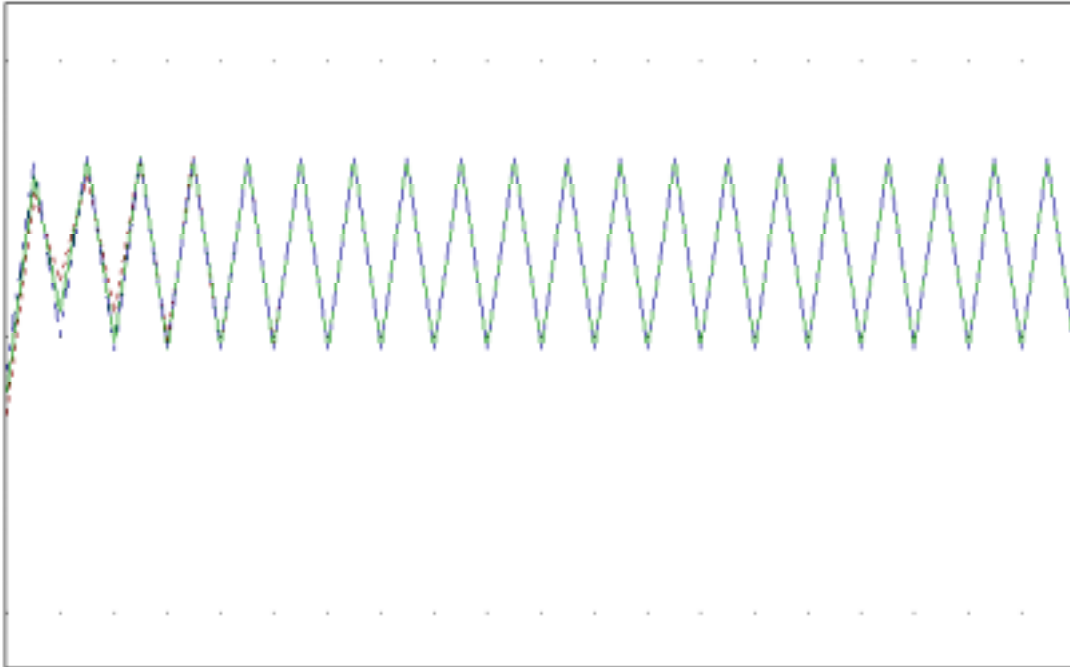
f3. 同



$$x_t = \lambda \times x_{t-1} \times (1 - x_{t-1})$$

When  $\lambda = 3$

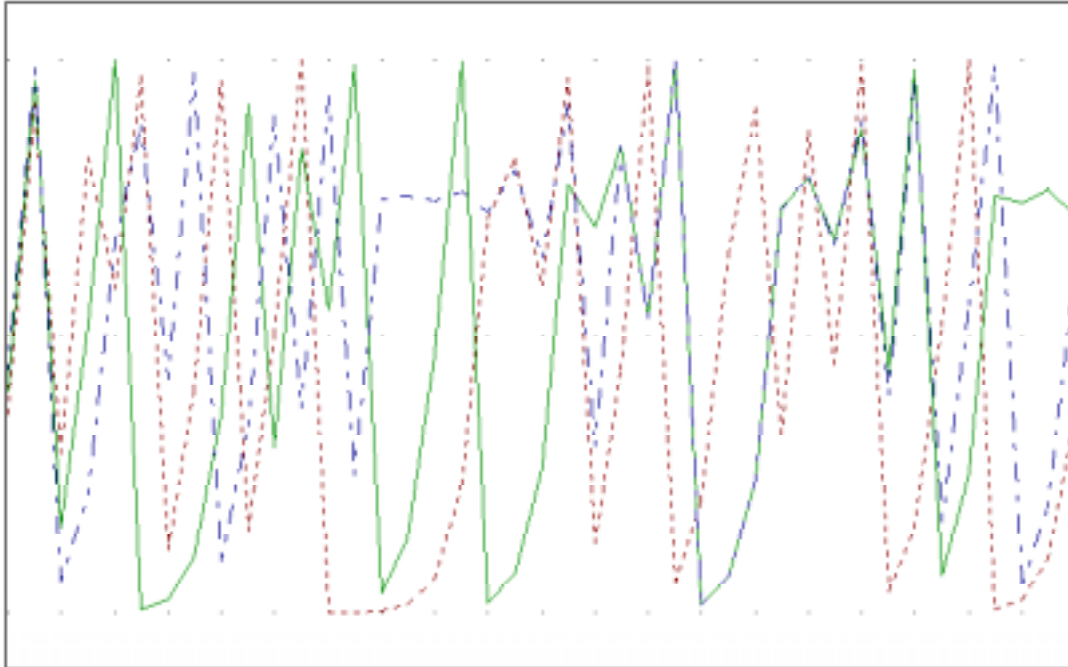
f4. 同



$$x_t = \lambda \times x_{t-1} \times (1 - x_{t-1})$$

When  $\lambda = 3.3$  (Diversing)

f5. 同



$$x_t = \lambda \times x_{t-1} \times (1 - x_{t-1})$$

When  $\lambda = 4$  (Explodes when  $\lambda$  exceeds at least 4.002)