

$$\begin{cases} f(0) = 8 \\ f(x+1) = 4f(x) - 1 \end{cases}$$

$$\begin{cases} a_0 = 8 \\ a_{n+1} = 4a_n - 1 \end{cases}$$

$$f(1) = a_1 = 4a_0 - 1 = 4 \times 8 - 1 = 31 \quad f(2) = a_2 = 4a_1 - 1 = 4 \times 31 - 1 = 123$$