Large Numbers

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The goal is to find the shortest and simplest definition of fastest growing sequence.

Using Conway's chained arrow notation $\rightarrow$ we define function F_0 as follows:

$$F_0(1) = 2 \tag{1}$$

$$F_0(n+1) = \underbrace{F_0(n) \rightarrow F_0(n) \rightarrow ... \rightarrow F_0(n)}_{F_0(n) \text{ times}} \tag{2}$$

We then define $F_k(n)$ recursively as follows:

$$F_{k+1}(n) = \underbrace{F_k(F_k(...(F_k(n))...)}_{F_k(n) \text{ times}} \tag{3}$$

Finally we define $Q_n = F_n(n)$. It's impossible to have any intuition of Q_n growth.