

$$1 + \frac{1}{2}$$

$$\frac{3}{2} = 1.5$$

$$1 + \left[\frac{1}{\left(2 + \frac{1}{5} \right)} \right]$$

$$1 + \frac{1}{\frac{11}{5}}$$

$$\frac{5}{5} + \left[\frac{2}{5} \right]$$

$$\frac{7}{5}$$

$$1 + \left(2 + \left[\frac{1}{\left(2 + \frac{1}{5} \right)} \right] \right)$$

$$1 + \frac{1}{2 + \frac{1}{5}}$$

$$1 + \frac{1}{\frac{10}{5} + \left(\frac{2}{5} \right)}$$

$$1 + \frac{1}{\frac{12}{5}}$$

$$\frac{12}{12} + \frac{5}{12}$$

$$\frac{17}{12}$$

$$1 + \frac{1}{\left(2 + \frac{1}{\left(2 + \left[\frac{1}{\left(2 + \frac{1}{5} \right)} \right] \right)} \right)}$$

$$2 + \frac{1}{2 + \frac{2}{5}}$$

$$2 + \frac{5}{12}$$

$$\frac{29}{12}$$

$$1 + \frac{12}{29}$$

$$\frac{41}{29}$$

$$1 = \frac{2}{3}$$

$$2 = \frac{5}{12}$$

$$3 = \frac{12}{29}$$

for i in range(n)

z = solveFraction(i)

1 + z = approx

reduceFraction([n, d])

twoNum = d * 2

num = twoNum + n

return [den, num]

SolveFraction(i)

if i < 1: return {}

if i == 1:

return reduceFrac([1, 2])

frac = solveFraction(i-1)

return reduceFrac(frac)