

u_0	\approx	1.1534873866
u_1	\approx	1.4436799178
u_2	\approx	1.4145142752
u_3	\approx	1.4142135943
u_4	\approx	1.4142135624
u_5	\approx	1.4142135624
u_6	\approx	1.4142135624
u_7	\approx	1.4142135624

$$\begin{cases} f(x) = \frac{1}{2} \left(x + \frac{2}{x} \right) \\ u_{n+1} = f(u_n) \quad \forall n \in \mathbf{N} \end{cases}$$

