

Among the numerous mathematical formulas that give an approximation of π i have selected this one because it it's a good exercise.

$(2143/22)^{1/4} = \pi$ (the square root of the square root of 2143/22 give the first eight correct decimals of pi) So i take my soroban and try, but i worked with four or five decimals to obtain the five correct decimals of pi.

Here in PDF is the different steps of the exercise i've done, of course, for those who are mastering Fukutaro's method they can go further with more decimals trying, with a giant soroban, to get the correct eight decimals. - *Dom Delage, December, 2019*

$$\sqrt[4]{\frac{2143}{22}} = 3,14159265\dots$$

$$2143/22 = 97,4090\dots$$

$$\sqrt{97,409}$$

9	7	4	0	9	0	0	0	0	0	0	0
9	0	8	2	0	4	5	0	0	0	0	0
9	8	0	6	8	4	5	0	0	0	0	0
9	8	6	0	9	4	7	0	0	0	0	0
9	8	6	9	0	5	9	1	9	5	0	0
9	8	6	9	5	0	9	8	4	8	7	5

$$\sqrt{97,409} = 9,8695\dots \Rightarrow 9,8696$$

$$\sqrt{9,8696}$$

0	0	9	8	6	9	6	0	0	0	0	0	0	0
3	0	0	4	3	4	8	0	0	0	0	0	0	0
3	1	0	1	2	9	8	0	0	0	0	0	0	0
3	1	4	0	0	5	0	0	0	0	0	0	0	0
3	1	4	1	0	1	8	5	9	5	0	0	0	0
3	1	4	1	5	0	2	8	8	8	7	5	0	0
3	1	4	1	5	9	0	0	6	1	3	5	9	5

$$\sqrt{9,8696} = 3,14159\dots$$