

$x = \sqrt{n}$, $x_1 = 1/(x - \text{floor}(x))$, $x_2 = 1(x_1 - \text{floor}(x_1))$, ...

n	x_1/x	x_2/x_1	x_3/x_1	x_4/x_1	x_5/x_1	x_6/x_1	x_7/x_1	x_8/x_1	x_9/x_1	x_{10}/x_1
1										
2	1.707107	1	1	1	1	1	1	1	1	1
3	0.788675	2	1	2	1	2	1	2	1	2
4										
5	1.894427	1	1	1	1	1	1	1	0.999996	1
6	0.908248	2	1	2	1	2	1	2	1	1.999999
7	0.58531	1.177124	0.78475	3	1	1.177124	0.78475	3	1	1.177124
8	0.426777	4	1	4	1	4	1	4	1	4
9										
10	1.948683	1	1	1	1	1	0.999996	1.000136	0.994861	1.242469
11	0.952267	2	1	2	1	2	1	2	1.000003	1.999866
12	0.622008	3	1	3	1	3	1	3	1.000001	2.999978
13	0.458013	0.929632	1.131483	0.697224	4	1	0.929632	1.131483	0.697224	4
14	0.360357	2.129171	0.851669	5	1	2.129171	0.851669	5	1	2.129171
15	0.295766	6	1	6	1	6	1	6	1	6
16										
17	1.970143	1	1	1	1	1	0.999973	1.001763	0.895782	0.445178
18	0.971405	2	1	2	1	2	1.000002	1.999836	1.002795	1.826592
19	0.639221	0.45644	1.320551	0.52822	0.760734	3	1	0.45644	1.320551	0.52822
20	0.473607	4	1	4	1	4	1	4.000001	0.999996	4.000307