



Find x_1 to 3 decimal places

1 $x_{n+1} = \sqrt{x_n + 5}, x_0 = 2$

3 $x_{n+1} = \frac{3}{x_n + 2}, x_0 = 2$

5 $x_{n+1} = \frac{x_n^2 + 4}{5}, x_0 = 0$

2 $x_{n+1} = \sqrt[3]{x_n + 10}, x_0 = 2$

4 $x_{n+1} = \sqrt{2x_n + 7}, x_0 = 3$

6 $x_{n+1} = 4 - \frac{1}{x_n}, x_0 = 3$

Find x_2 to 3 decimal places

7 $x_{n+1} = \sqrt{x_n + 5}, x_0 = 2$

9 $x_{n+1} = \frac{3}{x_n + 2}, x_0 = 0$

11 $x_{n+1} = \frac{x_n^2 + 4}{5}, x_0 = 2$

8 $x_{n+1} = \sqrt[3]{x_n + 10}, x_0 = 2$

10 $x_{n+1} = \sqrt{3x_n + 1}, x_0 = 4$

12 $x_{n+1} = 2 + \frac{1}{x_n^2}, x_0 = 2$

Find x_3 to 3 decimal places

13 $x_{n+1} = \sqrt{x_n + 5}, x_0 = 2$

15 $x_{n+1} = \frac{5}{x_n + 3}, x_0 = 1$

17 $x_{n+1} = \frac{x_n^3 + 1}{4}, x_0 = 0$

14 $x_{n+1} = \sqrt[3]{2x_n + 5}, x_0 = 2$

16 $x_{n+1} = \sqrt{10 - x_n}, x_0 = 3$

18 $x_{n+1} = \sqrt[3]{x_n^2 + 4}, x_0 = 1$

Iterate until the answer to 2 dp stops changing. Give the root to 2 dp.

19 $x_{n+1} = \sqrt{x_n + 5}, x_0 = 2$

21 $x_{n+1} = \frac{3}{x_n + 2}, x_0 = 0$

23 $x_{n+1} = \sqrt[3]{3x_n + 1}, x_0 = 2$

20 $x_{n+1} = \sqrt[3]{x_n + 10}, x_0 = 2$

22 $x_{n+1} = \sqrt{2x_n + 7}, x_0 = 3$

24 $x_{n+1} = 4 - \frac{1}{x_n}, x_0 = 3$

Find x_4 to 3 decimal places

25 $x_{n+1} = \sqrt[3]{5 - x_n}, x_0 = 1$

27 $x_{n+1} = \sqrt{4 + \frac{1}{x_n}}, x_0 = 2$

29 $x_{n+1} = \sqrt[3]{x_n + 1}, x_0 = 1$

26 $x_{n+1} = \frac{2}{x_n^2 + 1}, x_0 = 0.5$

28 $x_{n+1} = \frac{x_n^3 + 2}{7}, x_0 = 0.5$

30 $x_{n+1} = \frac{6}{x_n + 1}, x_0 = 1$