$x_{n+1}=6-\frac{2}{x_n}$

$x^2-5x+3=0$

$x_{n+1}=\sqrt{3-5x_n}$

$-x^3+3x^2-1=0$

$x^3-5x-2=0$

$x^3-5x^2-2=0$

$x_{n+1}=\sqrt{\left(\frac{2}{3}+\frac{2}{x_n}\right)}$

$x^3-3x-5=0$

$x_{n+1}=\frac{x_n^3+2}{5}$

$x_{n+1}=\sqrt[3]{(3x_n+5)}$

$x^3+5x^2-2=0$

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

$x_{n+1}=\frac{2-x_n^2}{6}$

$x^3+3x^2-1=0$

$x^3-3x+5=0$

$x_{n+1}=\frac{x_n^2-3}{5}$

$x_{n+1}=\sqrt{\left(\frac{2}{3}-\frac{2}{x_n}\right)}$

$x^2+5x-3=0$

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

$$3x^3-2x-6=0$$

$$x_{n+1}=\sqrt{\frac{1}{3-x_n}}$$

$$x^2-5x-3=0$$

$$x_{n+1}=\frac{2}{x_n^2}-5$$

$$x_{n+1}=\sqrt[3]{(3x_n-5)}$$

$$x_{n+1} = \sqrt{\frac{1}{x_n + 3}}$$

$$x^3 - 5x + 2 = 0$$

$$3x^3 - 2x + 6 = 0$$

$$x_{n+1} = 5 - \frac{3}{x_n}$$

$$x^2 - 6x + 2 = 0$$

$$x^2 + 6x - 2 = 0$$