

$$\begin{array}{l}
2x^2+\\
x-\\
15=\\
0x^*=\\
2x^5=\\
x_{k+1}^2=\\
15-\\
x_k^2,k=\\
0,1,2,\cdots x_0=\\
2\\
x_{k+1}^2=\\
\frac{15}{2x_k+1},k=\\
0,1,2,\cdots x_0=\\
2\\
x_{k+1}=\\
x_k-\\
\frac{2x_k^2+x_k-15}{4x_k+1},k=\\
0,1,2,\cdots x_0=\\
2\\
x_1,x_2,\cdots,x_k,\cdots,\\
\phi(x)x_k+\\
1=\\
\phi(x_k)\{x_k\}\lim_{k\rightarrow\infty}x_k=\\
x^*x^*\phi
\end{array}$$

$$x_{k+1}=15-x_k^2,k=0,1,2,\cdots x_0=2$$

$$x_1=11$$

$$x_2=-106$$

$$x_3=-11221$$

$$x_4=-125910826$$

$$\begin{array}{l}
x_{k+1}=\\
15-\\
x_k^2,k=\\
0,1,2,\cdots x_0=\\
2
\end{array}$$

$$x_{k+1}=\frac{15}{2x_k+1},k=0,1,2,\cdots x_0=2$$

$$x_1=3.0$$

$$x_2=2.142857142857143$$

$$x_3=2.8378378378378377$$

$$x_4=2.2469635627530367$$

$$x_5=2.7302873986735445$$

$$x_6=2.3217748374586518$$

$$x_7=2.6579016512723084$$

$$x_8=2.374994799783671$$

$$x_9=2.6087003707152228$$

$$x_{10}=2.4125837506412577$$

$$\cdots$$

$$x_{50}=2.4999395640135855$$

$$\begin{array}{l}
x_{k+1}=\\
\frac{15}{2x_k+1},k=\\
0,1,2,\cdots x_0=\\
2
\end{array}$$

$$x_{k+1}=x_k-\frac{2x_k^2+x_k-15}{4x_k+1},k=0,1,2,\cdots x_0=2$$

$$x_1=2.5555555555555554$$

$$x_2=2.5005500550055006$$

$$x_3=2.5000000550000006$$

$$x_4=2.5000000000000004$$

$$x_5=2.5$$

$$x_6=2.5$$

$$x_{k+1}=$$