

Solutions

2.1 $\sqrt{1+2}=\sqrt{3}$.

2.2 Solve $L^2-L-2=0$ and retain the nonnegative solution.

2.3 $2^2-2-2=0$.

3.1 False. The equation $x=2$ can be rewritten $x=2x-2$. Iteration $x_{\text{next}}=2x-2$ from $x_0=3$ gives 4,6,10,... and diverges, although 2 is a fixed point.

Local review guidance: show the chosen method; give the checked result; explain the condition or failed shortcut. This is authored classroom guidance.