

EX.1.2.8, Sauer3

Use Theorem 1.6 to determine whether Fixed-Point Iteration of $g(x)$ is locally convergent to the given fixed point r . (a) $g(x) = (2x - 1)/x^2$, $r = 1$, (b) $g(x) = \cos x + \pi + 1$, $r = \pi$, (c) $g(x) = e^{2x} - 1$, $r = 0$.