Copyright (C) 2018, 2012, 2016 by Pearson Education Inc. All Rights Reserved, please visit www.pearsoned.com/permissions/.

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.