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EX.1.4.4, Sauer3

Use Theorem 1.11 or 1.12 to estimate the error e_{i+1} in terms of the previous error e_i as Newton's Method converges to the given roots. Is the convergence linear or quadratic?

a.
$$32x^3 - 32x^2 - 6x + 9 = 0$$
, $r = -\frac{1}{2}$, $r = \frac{3}{4}$;

b.
$$x^3 - x^2 - 5x - 3 = 0$$
, $r = -1$, $r = 3$.