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CP.1.5.3, Sauer3 Langou

Use Inverse Quadratic Interpolation to find the (single) solution of each of the following equations. Use initial guesses $x_0 = 1$, $x_1 = 2$, $x_2 = 0$, and update by retaining the three most recent iterates.

a.
$$x^3 = 2x + 2$$

b.
$$e^x + x = 7$$

c.
$$e^x + \sin x = 4$$