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CP.2.7.7.b2c, Sauer3

Apply Broyden I with starting guesses $x_0 = (1, 1)$ and $A_0 = I$ to the systems in EX.2.7.3. Report the solutions to as much accuracy as possible and the number of steps required.

(b)
$$\begin{cases} u^2 + 4v^2 = 4 \\ 4u^2 + v^2 = 4 \end{cases}$$
 (c)
$$\begin{cases} u^2 - 4v^2 = 4 \\ (u-1)^2 + v^2 = 4 \end{cases}$$