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.

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