Oh hey, what's up. We could take x = y, or we could solve

$$\begin{pmatrix} a & b \\ c & d \end{pmatrix}^2 = 1.$$
 (1)

Equation (1) is standard. See also [1].

References

[1] Paul D. Nelson. Bounds for standard L-functions. $arXiv\ e$ -prints, page arXiv:2109.15230, September 2021.