Im Debattierclub n°123

Almost integers 1

Find digits a, b, c, and d so that

$(ab.cd)^2 = ABCD...$

and $10^5(ab.cd)^{-1} = EFGH...$

are almost integers [1,2].

Example

$(39.37)^2 = 1549.9969$, $10^5(39.37)^{-1} = 2540.00508$

Application ?

References

[1] Weisstein, Eric W. "Almost Integer." From *MathWorld*--A Wolfram Web Resource
http://math world..com/AlmostInteger.html

[2] https://en.wikipedia.org/wiki/Almost_integer