NCERT Intext Pg.41 Q2.4

When they say "Hydrogen electrode" what they are really referring to is irrespective of the solution used as long as it provides H^+ ions while the standard hydrogen electrode is defined at a 1M H^+ ion solution, any other is considered non-standard. Context being that one might

Idk from where

$10^{0.something}$ can be found by doing the following.

$$10^{0.4} = e^{\ln 10^{0.4}} = e^{0.4 \ln 10} = e^{0.4} \times e^{\ln 10}.$$

Now we can simply find the e^a terms using the e^x expansion.

$$e^x = \sum_{n=0}^{\text{inf}} \frac{x^n}{n!}$$