Simplify

$$
\begin{gathered}
81^{-2 / 4}=\frac{1}{(\sqrt[4]{81})^{2}}=\frac{1}{3^{2}}=\frac{1}{9} \\
\frac{\left(e^{5 x}\right)^{-2 / 5}}{\ln e^{2}}=\frac{e^{-2 x}}{2} \\
\text { find all solutions }
\end{gathered}
$$

$$
\begin{gathered}
e^{x^{2}+2 x}=e^{35}: \quad x^{2}+2 x=35: \quad 0=x^{2}+2 x-35=(x+7)(x-5): \quad x=5 /-7 \\
\ln \left(x^{2}-1\right)=1=\ln e: \quad x^{2}-1=e: \quad x^{2}=e+1: \quad x= \pm \sqrt{e+1} \\
X \underset{\text { inj }}{\imath} Y \Leftrightarrow{ }^{A \cap B} \downarrow={ }^{A} \downarrow \cap{ }^{B} \downarrow
\end{gathered}
$$

