$4 e^4 + 1 = 0$

The domain is all values that e is allowed to be.

impossible , then the domain of w is $(-\infty,\infty)$ i.e. $\mathbf{e} \in \mathbb{R}$

The domain will then be all other e-values. When is this denominator equal to zero?

I need to find all values of e that would cause division by zero.

Since I can't divide by zero (division by zero isn't allowed,