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

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

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

 $4 i^4 + 16 = 0$

Since I can't divide by zero (division by zero isn't allowed, I need to find all values of i that would cause division by zero.