The domain is all values that t is allowed to be.
Since I can't divide by zero (division by zero isn't allowed,

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

When is this denominator equal to zero?  $5t^4+4=0$ 

The domain will then be all other t-values.

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