

1.

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.
The domain will then be all other t -values.

When is this denominator equal to zero?

$$5t^4 + 4 = 0$$

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