1.

The domain is all values that v is allowed to be.
Since I can't divide by zero (division by zero isn't allowed,
I need to find all values of v that would cause division by zero.
The domain will then be all other v-values.
 When is this denominator equal to zero?

$5v^4 + 25 = 0$

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