

3.

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?

$$v^2 - 1 = 0$$

$v = \pm 1$ then the domain of s is $\{v \mid v \neq 1 \text{ or } -1\}$