

5.

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

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

The domain will then be all other q -values.

When is this denominator equal to zero?

$$q^2 - 9 = 0$$

$q = \pm 3$ then the domain of w is $\{q \mid q \neq 3 \text{ or } -3\}$