4.

The domain is all values that h is allowed to be.
Since I can't divide by zero (division by zero isn't allowed,
I need to find all values of h that would cause division by zero.
The domain will then be all other h-values.
 When is this denominator equal to zero?
$h^2 - 9 = 0$
$h = \pm 3$ then the domain of g is $\{h | h \neq 3 \text{ or } -3\}$