$h^2 - 10 h + 9 = 0$

The domain will then be all other h-values. When is this denominator equal to zero?

h=1 or 9 then the domain of q is $\{h\nmid h\neq 1$ or $9\}$

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.