1.

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

$j^2 - 27j + 50 = 0$

j = 2 or 25 then the domain of e is $\{j \mid j \neq 2 \text{ or } 25\}$