

4.

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

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

The domain will then be all other b -values.

When is this denominator equal to zero?

$$b^2 - 12b + 27 = 0$$

$b = 3$ or 9 then the domain of u is $\{b \mid b \neq 3 \text{ or } 9\}$