

3.

The domain is all values that  $u$  is allowed to be.

Since I can't divide by zero (division by zero isn't allowed,  
I need to find all values of  $u$  that would cause division by zero.  
The domain will then be all other  $u$ -values.

When is this denominator equal to zero?

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

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