

5.

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

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

When is this denominator equal to zero?

$$d^2 - 6d + 8 = 0$$

$d=2$  or  $4$  then the domain of  $i$  is  $\{d \mid d \neq 2 \text{ or } 4\}$