

4.

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

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

The domain will then be all other  $f$ -values.

When is this denominator equal to zero?

$$f^2 - 4 = 0$$

$f = \pm 2$  then the domain of  $i$  is  $\{f \mid f \neq 2 \text{ or } -2\}$