3.

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

$p^2 - 4 = 0$

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