2.

The domain is all values that y is allowed to be.
Since I can't divide by zero (division by zero isn't allowed,
I need to find all values of y that would cause division by zero.
The domain will then be all other y-values.
 When is this denominator equal to zero?
$$3 y^4 + 16 = 0$$
impossible , then the domain of f is $(-\infty, \infty)$ i.e. $y \in \mathbb{R}$