

3.

The domain is all values that b is allowed to be.

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

When is this denominator equal to zero?

$$2b^4 + 4 = 0$$

impossible , then the domain of i is $(-\infty, \infty)$ i.e. $b \in \mathbb{R}$