2.

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?

$2\,d^4 + 1 = 0$

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