Calc Review

Suppose we have a single function $f: \mathbb{R} \to \mathbb{R}$ of a single variable $x \in \mathbb{R}$ i.e. $f(x)$

$$f_1(x) = x^2 - 4$$
$$f_2(x) = x^2 + 4x + 4$$
$$f_3(x) = e^x + \log_e(x)$$

We are sometimes required to find values of x for which $f(x) = 0$. Solutions are called the "roots of the eqn $f(x) = 0$". Also called the "zeros" ~~the~~ of the func $f(x)$.

This is a "univariate" problem.
↳ Single variable

Note: What is a singularity?

Note: Intermediate Value Thm
If ~~the~~ a func is continuous in some interval & it changes sign over the interval then there needs to be a ~~value~~ pt in the interval where $f(x) = 0$