A Comment on Change of Notation

Note the change of notation:

$$\text{from } H(s) \text{ or } G(s) = \frac{q(s)}{p(s)} \quad \text{to } L(s) = \frac{b(s)}{a(s)}$$

— the RL method is quite general, so $L(s)$ is not necessarily the *plant* transfer function, and K is not necessary *feedback gain* (could be *any parameter*).

E.g., $L(s)$ and K may be related to plant transfer function and feedback gain through some transformation.

As long as we can represent the poles of the closed-loop transfer function as roots of the equation $1 + KL(s) = 0$ for *some choice* of K and $L(s)$, we can apply the RL method.