Some Possible Confusions

(i) CL (or Feedback) Transfer Function:

\[ T_{cl}(s) = \frac{G_{co}(s)G_{p}(s)}{1 + G_{co}(s)G_{p}(s)H(s)}. \]

(ii) For Unity Feedback simply set \( H(s) = 1 \).

(iii) For \( e_{ss} - r(t) \) and \( e_{ss1(t)} - r(t) \) please refer to LN equations (2.20) and (2.21).

(iv) For RLocus: Begin by plotting Poles and Zeroes of

\[ G_{co}(s)G_{p}(s)H(s), \]

or of

\[ G_{co}(s)G_{p}(s) \]

for unity feedback. You can forget about the term “open loop” poles and zeroes. Please read LN, Section 4.2, pp. 41–51.

(v) The RLocus is symmetrical wrt to the real axis!