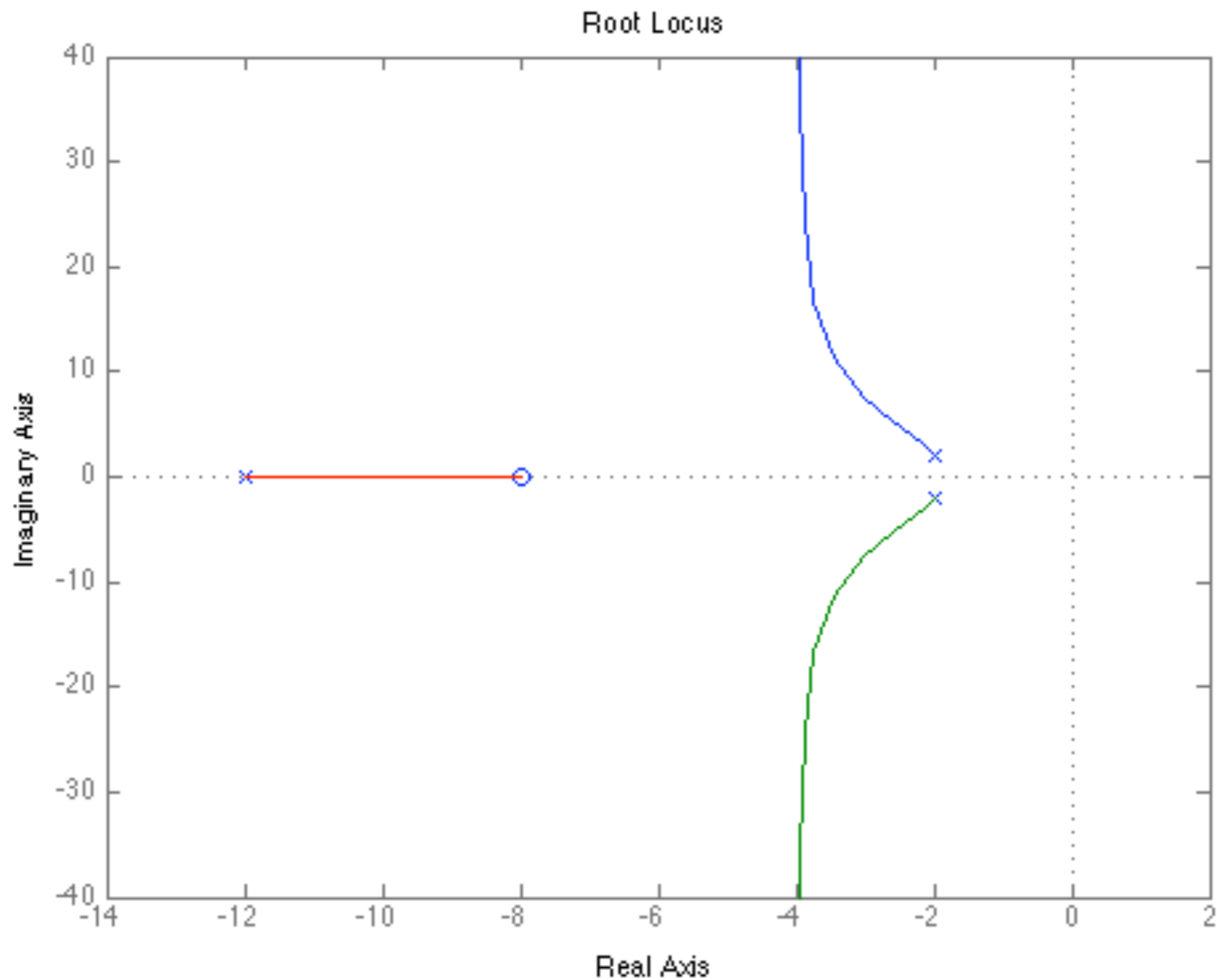


Root locus :

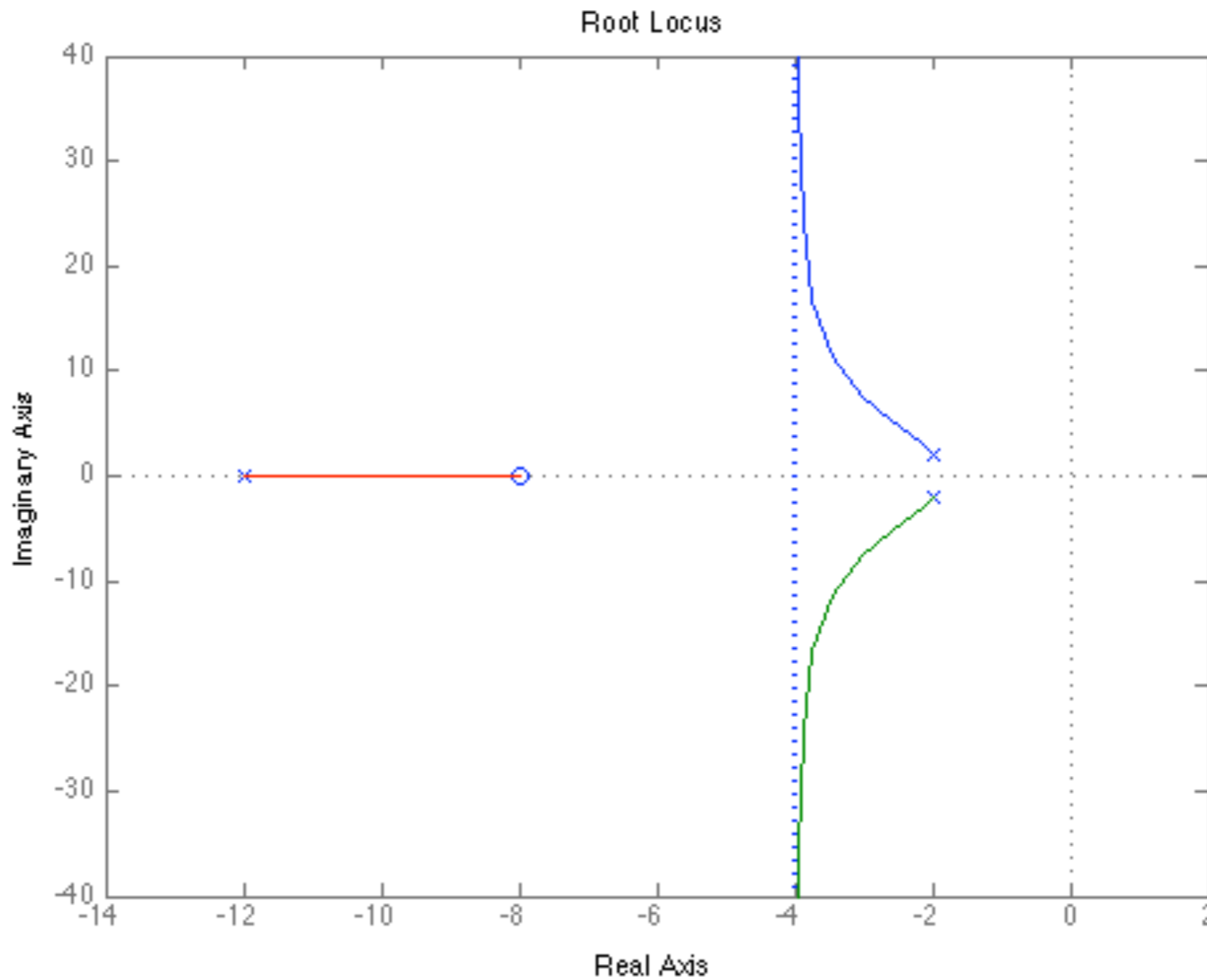
Effect of relative degree

Root locus of $L(s) = \frac{s + 8}{(s + 12)(s^2 + 4s + 8)}$

That is, roots of $1 + kL(s) = 0$ as k varies from 0 to $+\infty$



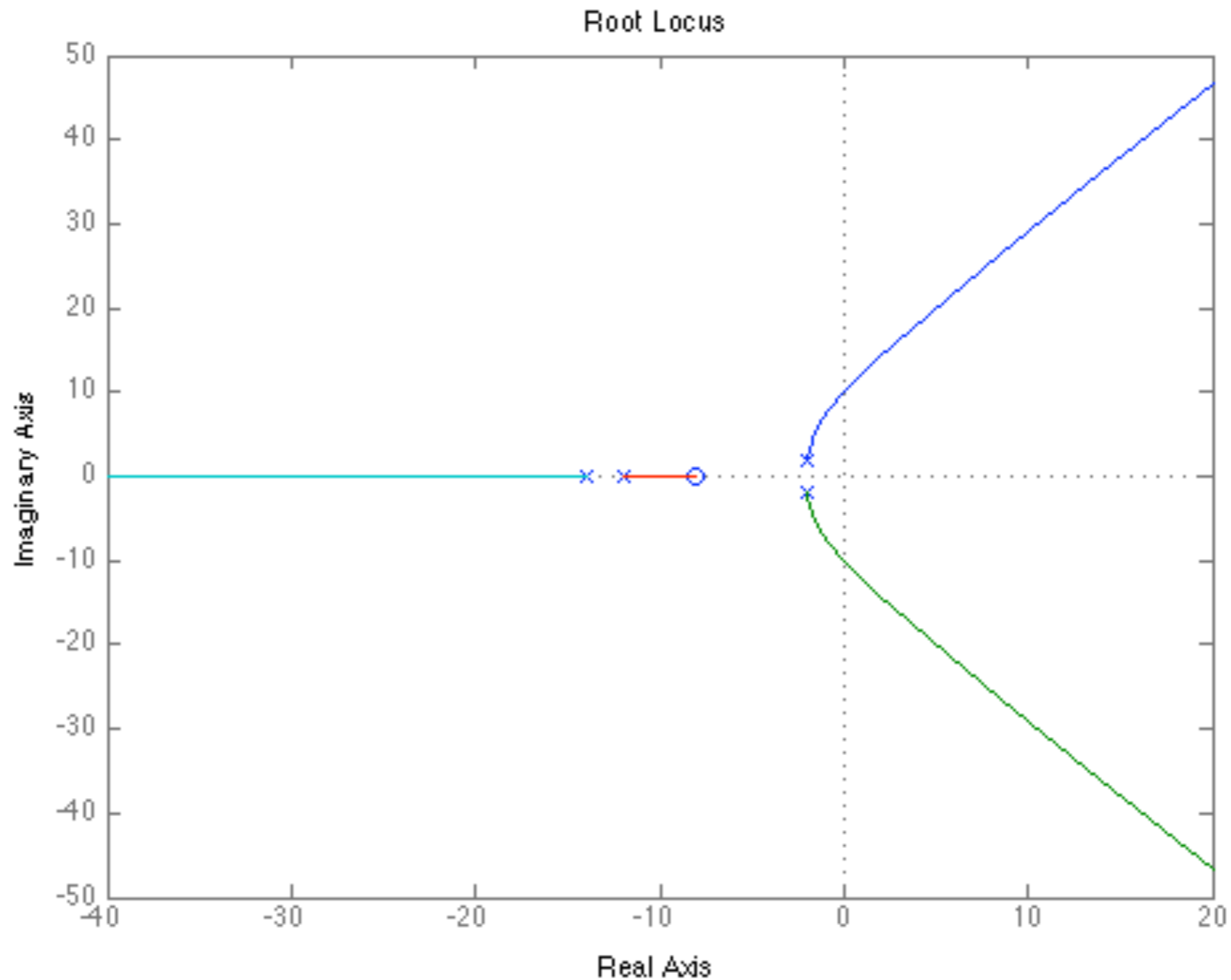
rel. deg. = 2 \Rightarrow asymptotes radiate out at 90°



Root locus of

$$L(s) = \frac{s + 8}{(s + 14)(s + 12)(s^2 + 4s + 8)}$$

That is, roots of $1 + kL(s) = 0$ as k varies from 0 to $+\infty$

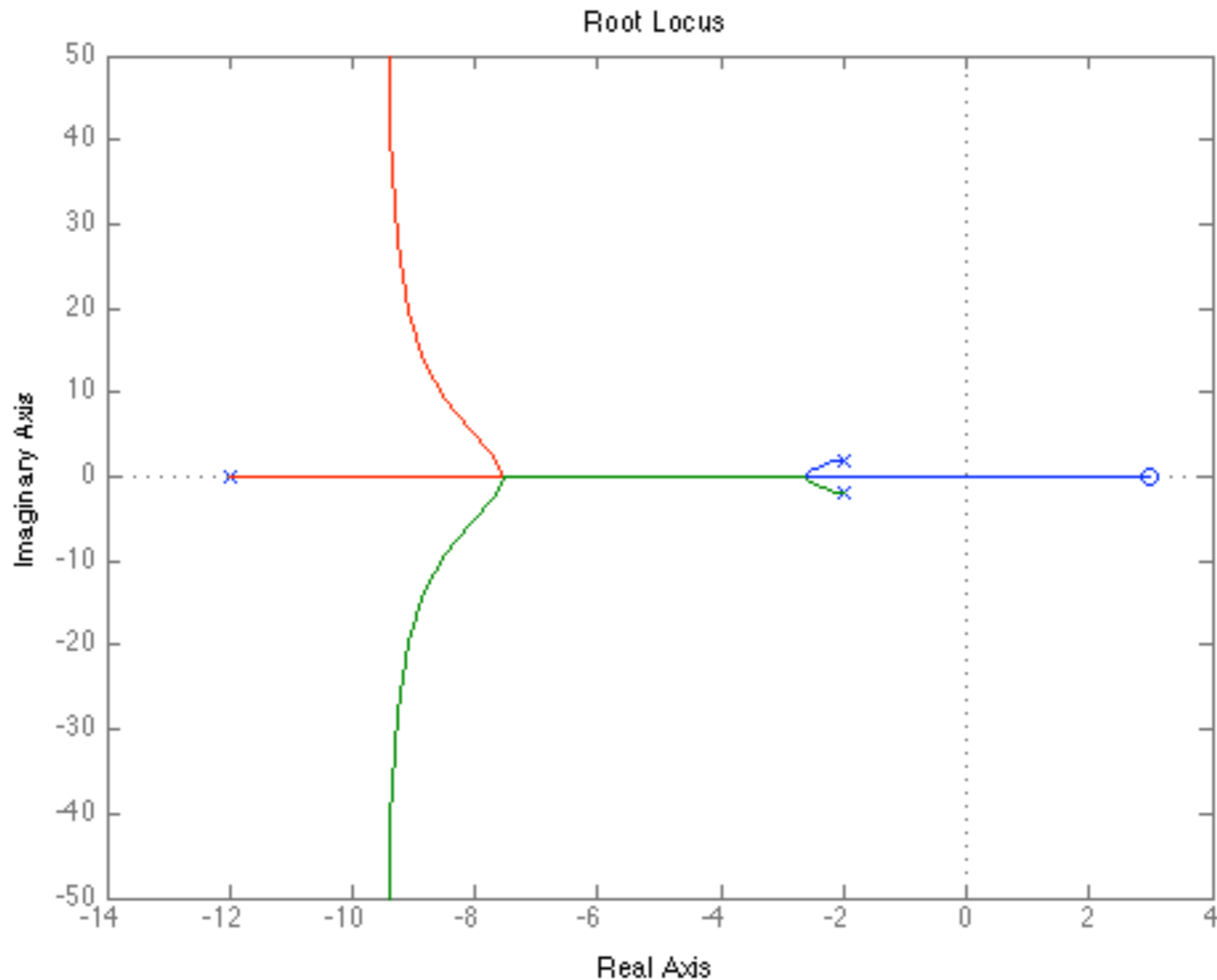


Root locus :

Effect of zero locations

Root locus of $L(s) = \frac{s - 3}{(s + 12)(s^2 + 4s + 8)}$

That is, roots of $1 + kL(s) = 0$ as k varies from 0 to $+\infty$



Root Locus

