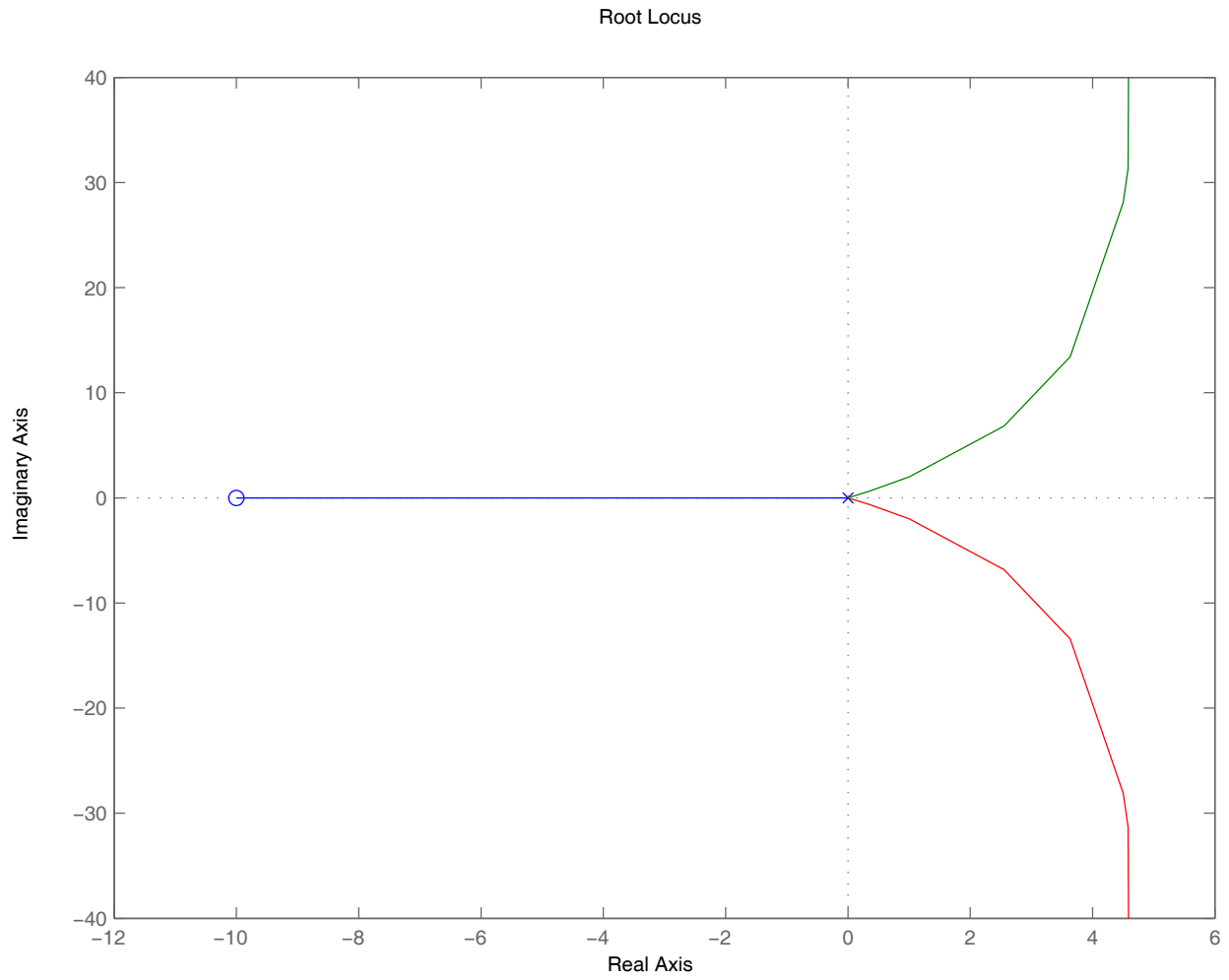
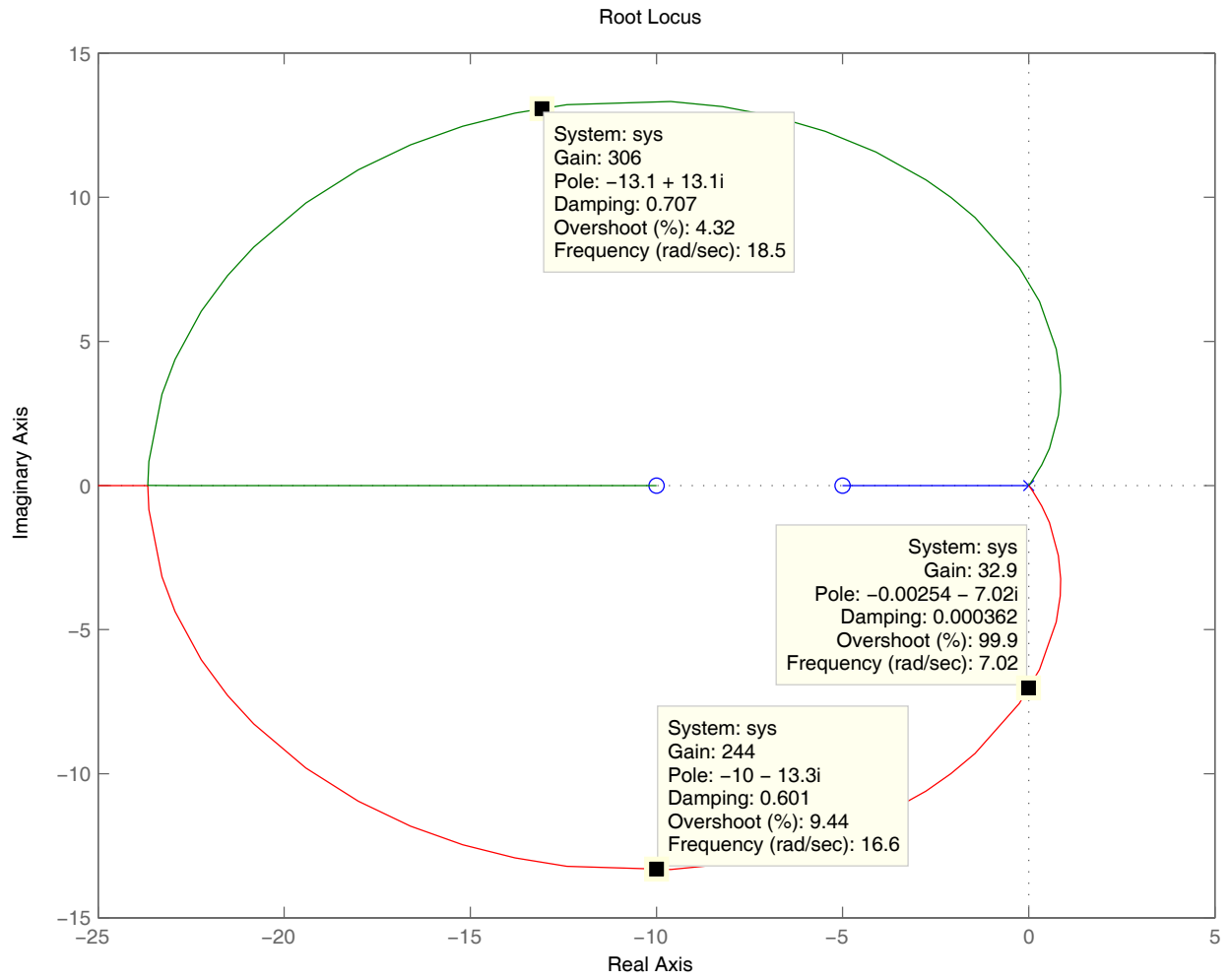


# Root Locus examples

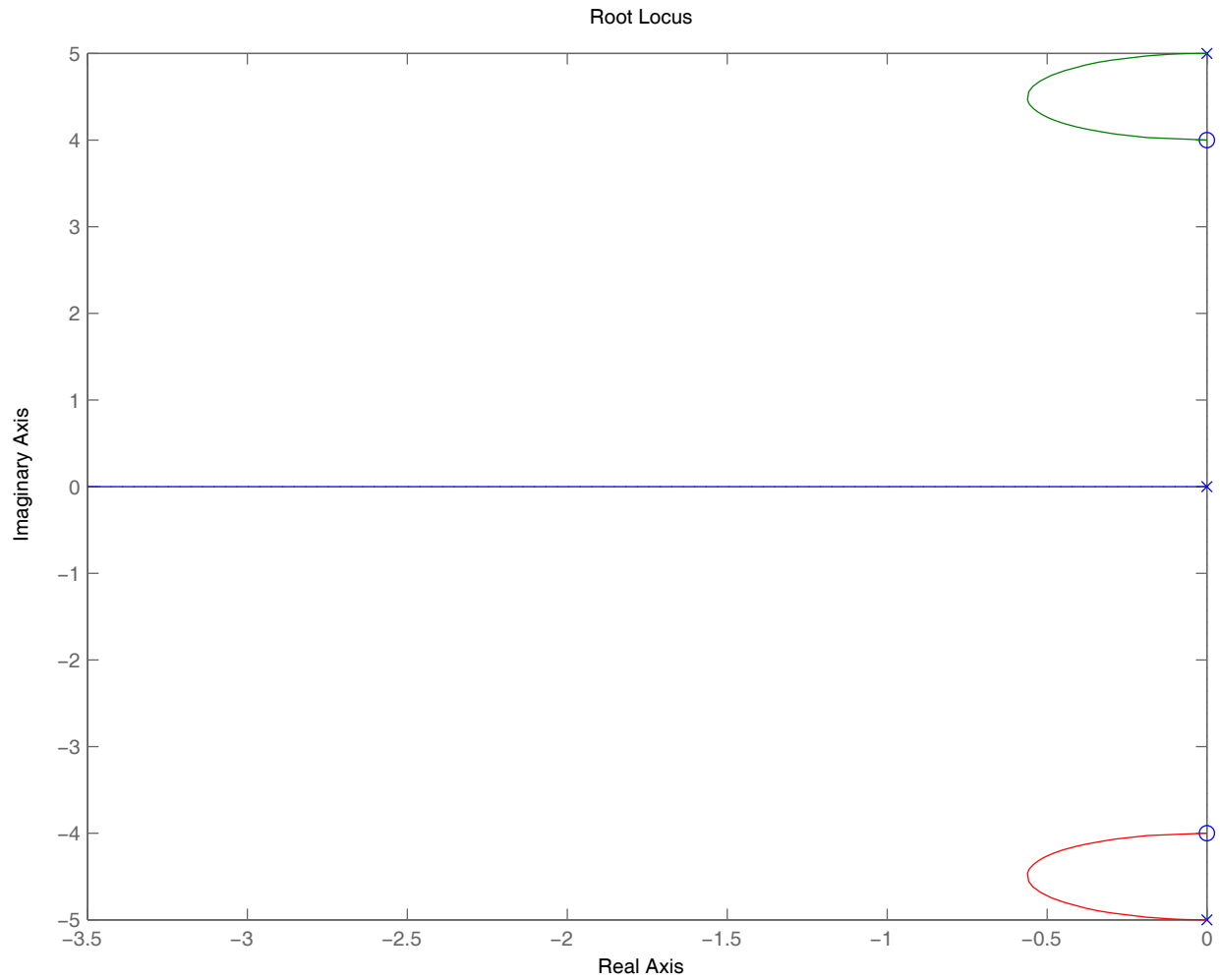
$$K \frac{s+10}{10s^3}$$



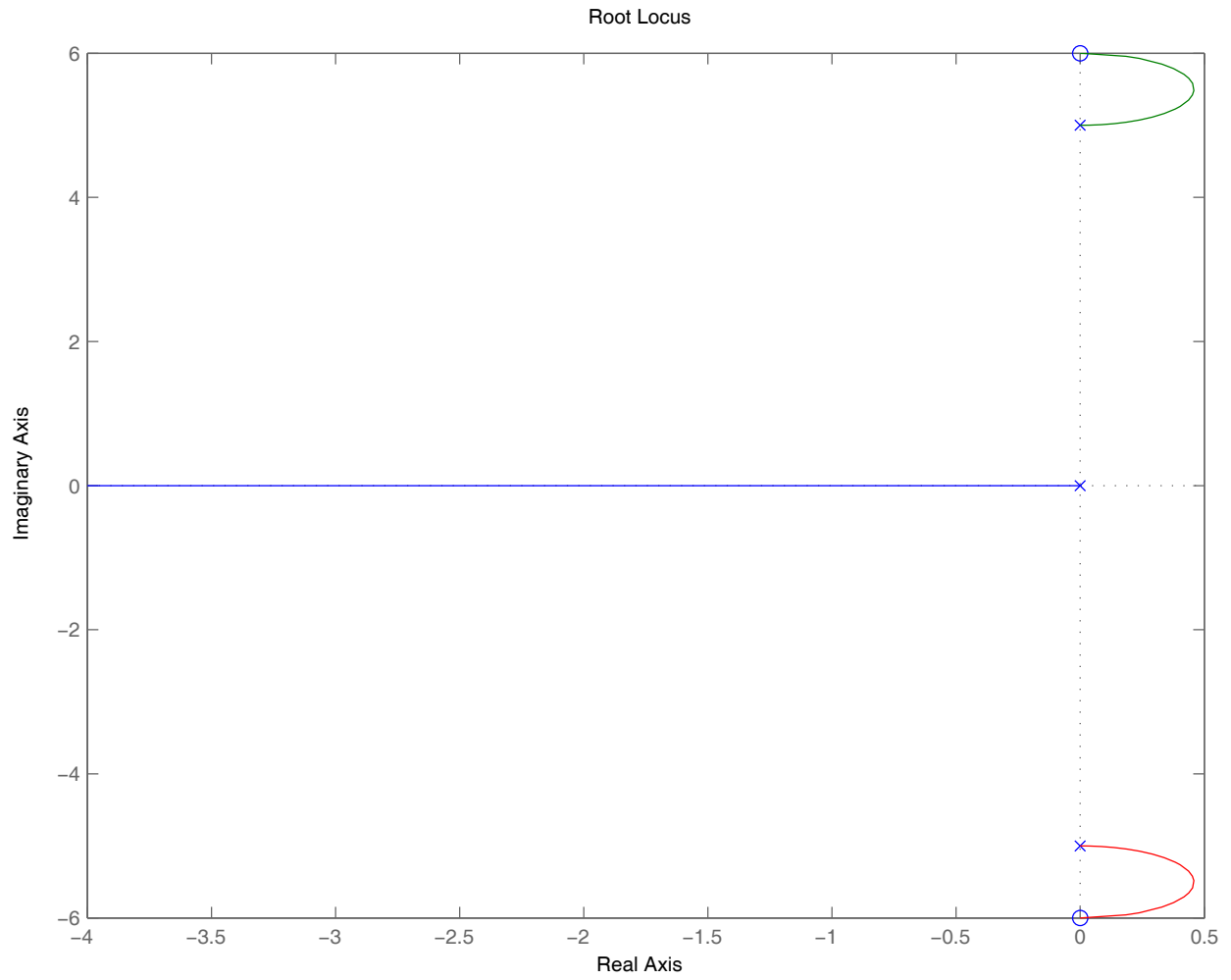
$$K \frac{s^2 + 15s + 50}{10s^3}$$



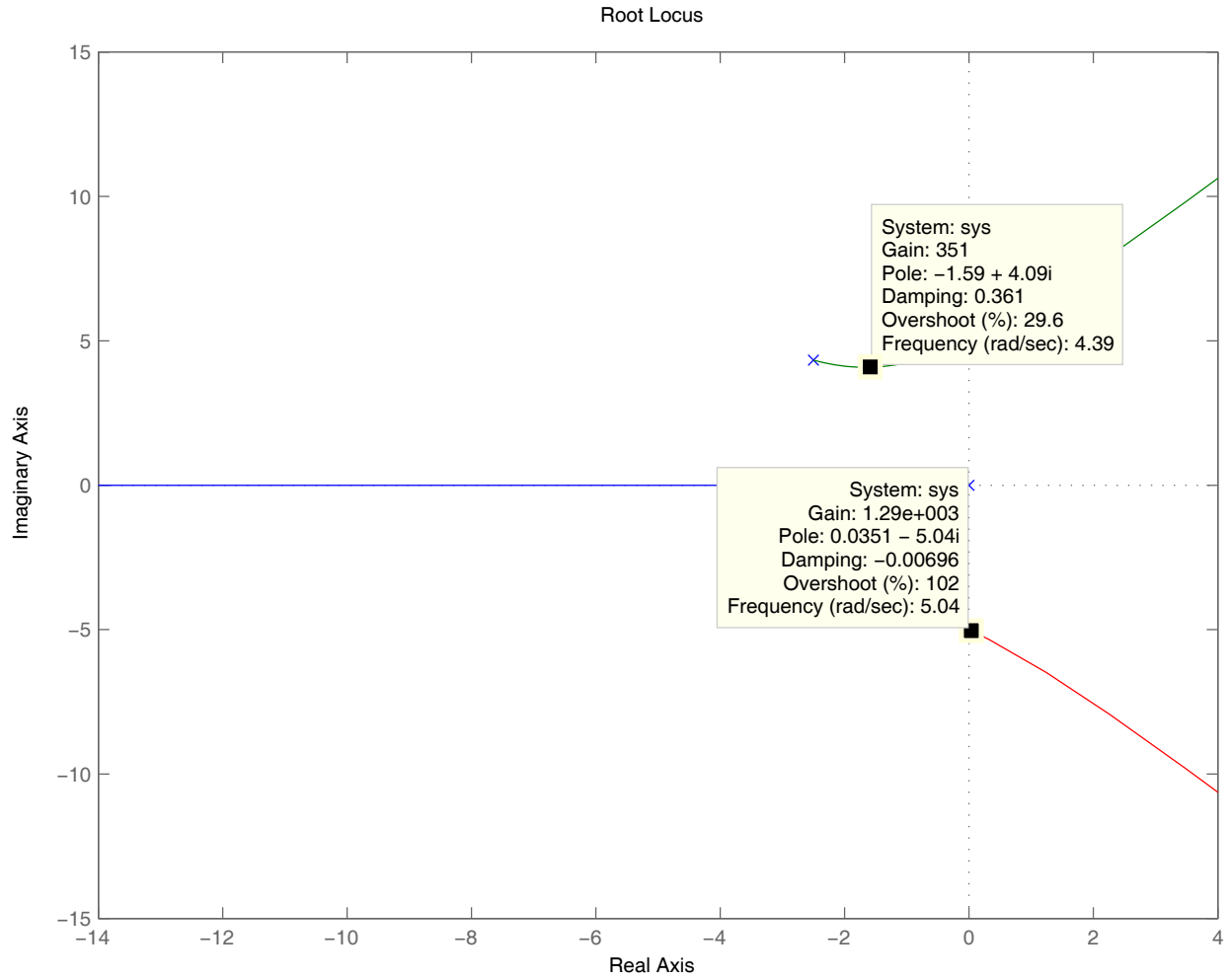
$$K \frac{s^2 + 16}{s(10s^2 + 250)}$$



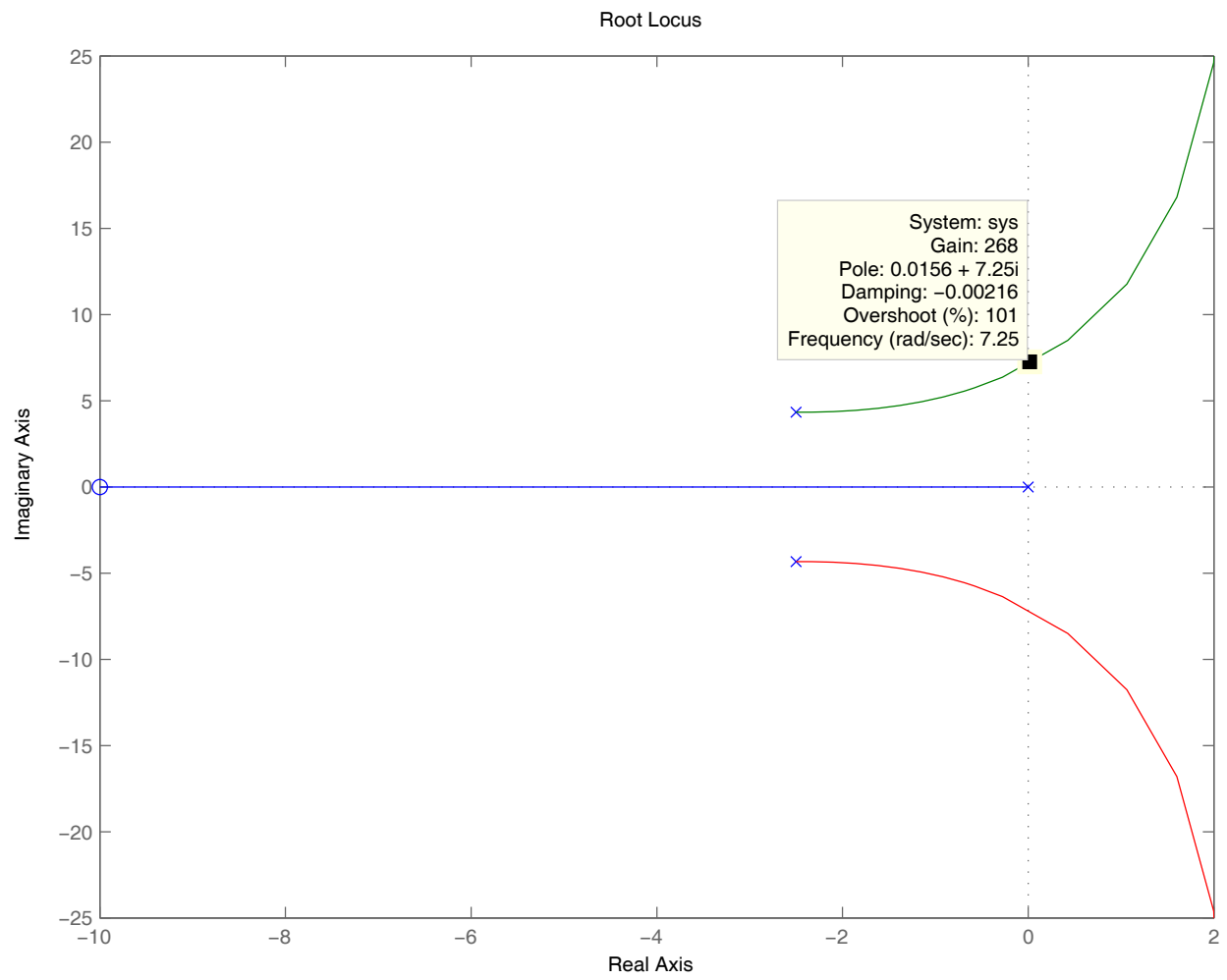
$$K \frac{s^2 + 36}{s(s^2 + 25)}$$



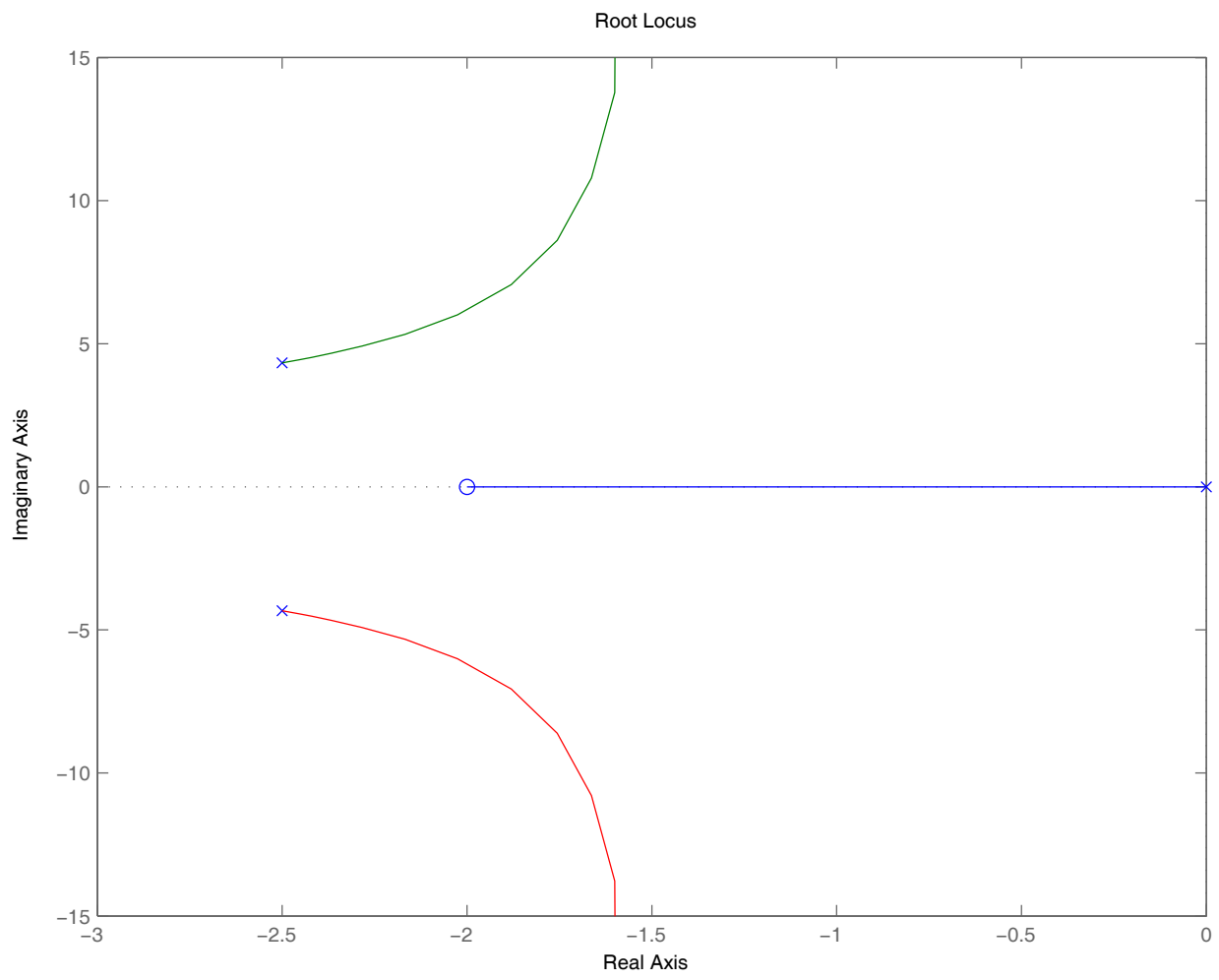
$$K \frac{1}{s(10s^2 + 50s + 250)}$$



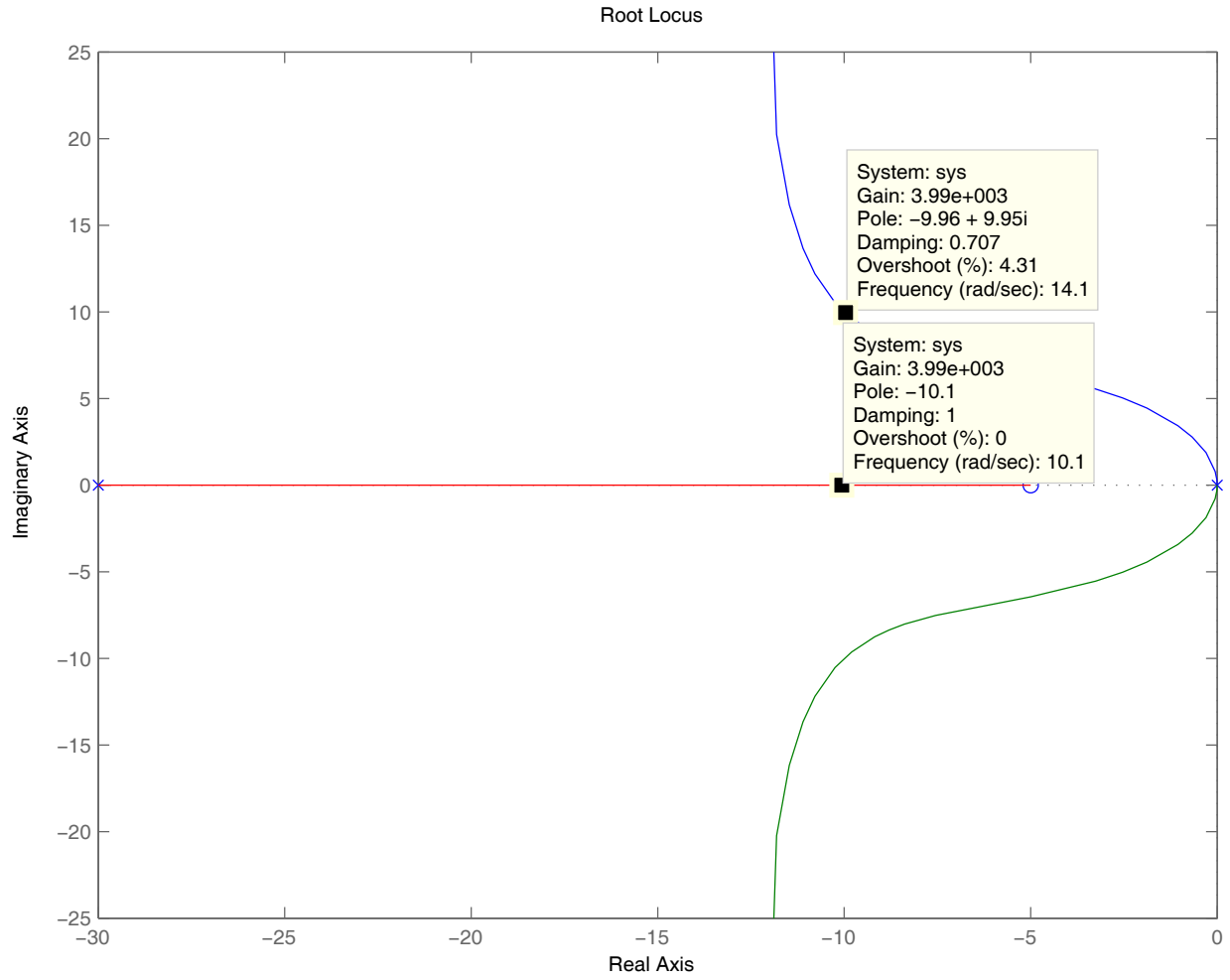
$$K \frac{1}{s(10s^2 + 50s + 250)}$$



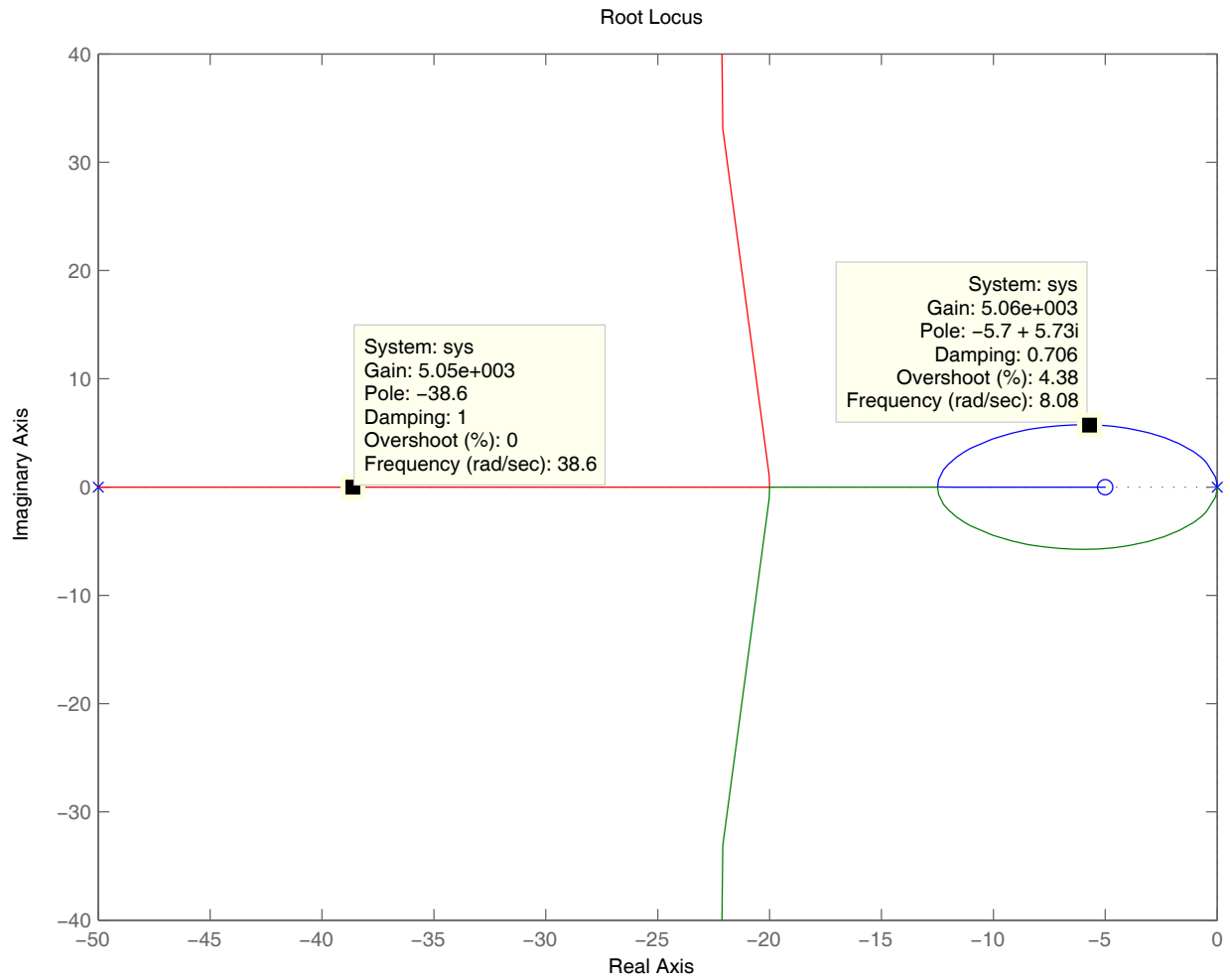
$$K \frac{s + 2}{s(10s^2 + 50s + 250)}$$



Lead Compensator for the  $\frac{1}{10s^2}$  plant  $\Rightarrow K \frac{s+5}{10s^2(s+30)}$



Lead Compensator for the  $\frac{1}{10s^2}$  plant  $\Rightarrow K \frac{s+5}{10s^2(s+50)}$



Lag Compensator for the  $\frac{1}{10s^2}$  plant  $\Rightarrow K \frac{s+10}{10s^2(s+5)}$

