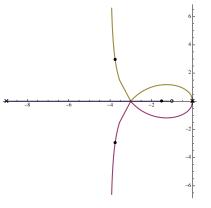
Double Integrator & Lead Compensator

$$L(s) = \frac{s+1}{s^2(s+p)}$$

Let's try p in between p = 5 and p = 10, say p = 9:



— for this value of p, the branches meet ($break\ in$) and separate ($break\ away$) at the same point on the real axis.