simple_systems

$$\dot{x} = 2x + u$$

Consider closed loop dynamics using state-feedback

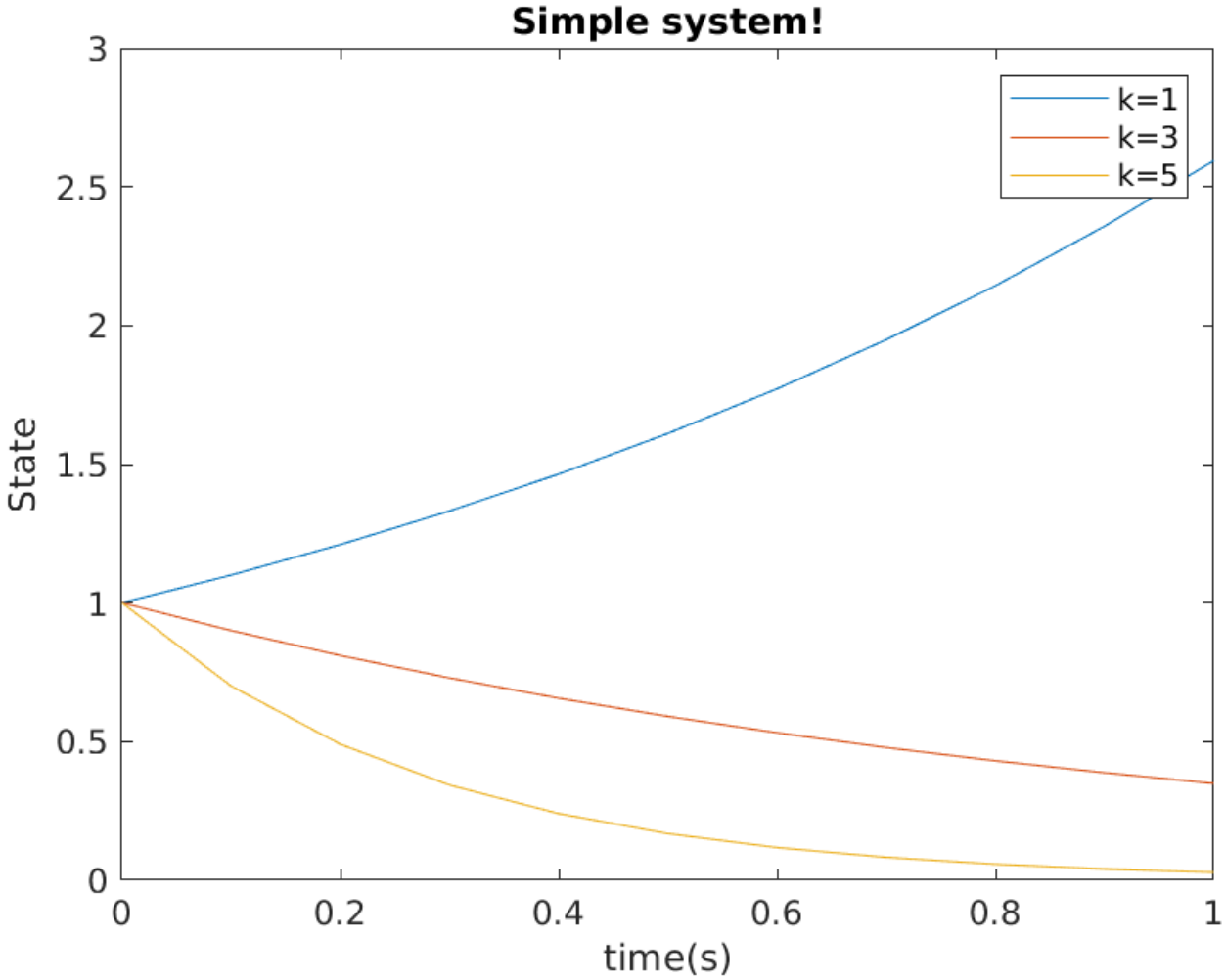
$$\dot{x} = 2x - k_i x$$

Observations

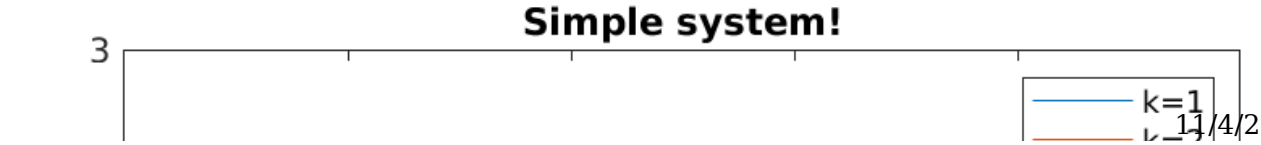
using state feedback

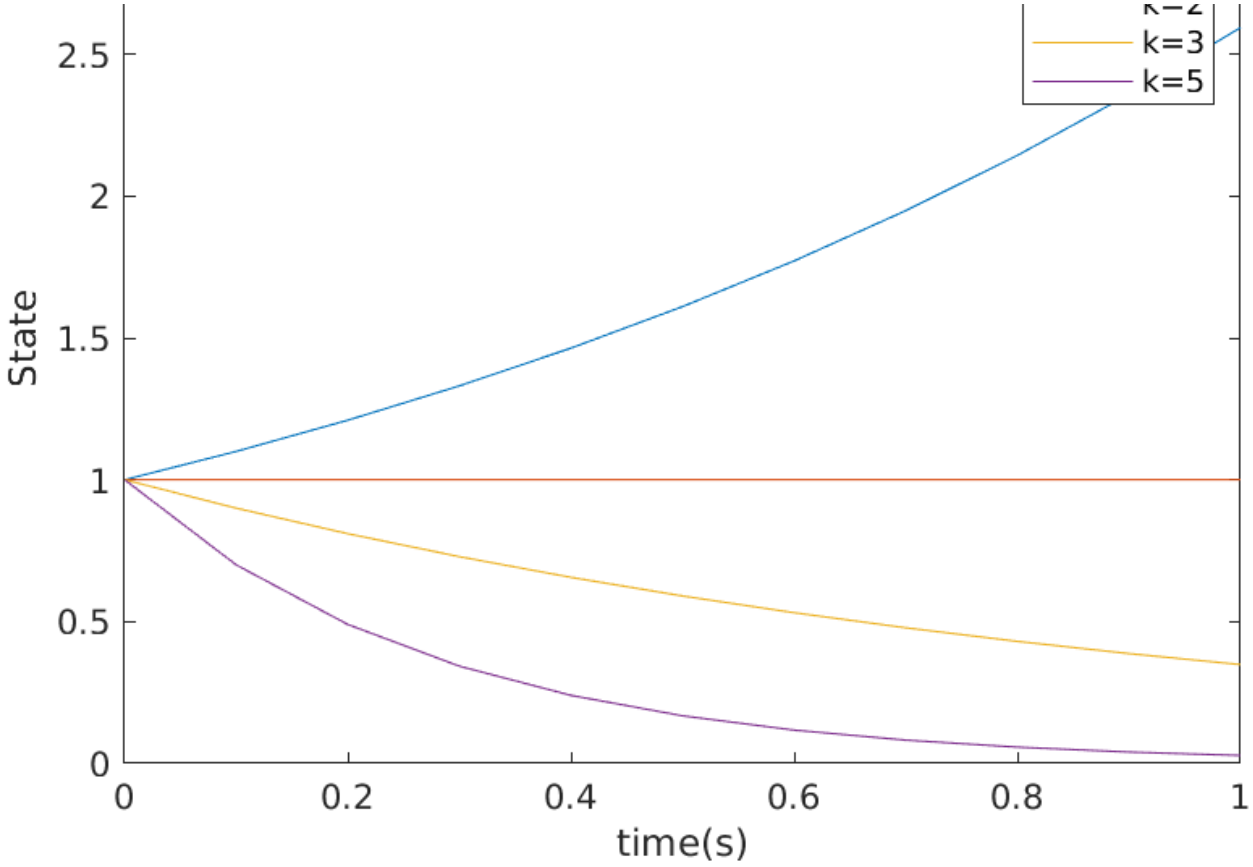
When $k_i > 2$ the stem will level out `k = 3, k = 5`

when $k_i < 2$ `k=1` the system will continue to grow



What happens at `K = 2`




k=3
k=5
State
time(s)
0
0.5
1
1.5
2
2.5
0
0.2
0.4
0.6
0.8
1