if $D(s) = \frac{1}{s^2}$ (unit ramp) then

$$\lim_{t\to\infty} y(t) = \lim_{s\to 0} sY(s) = \lim_{s\to 0} s \cdot \frac{10\,s(s+2)}{s^3+3s^2+2s+10k} \cdot \frac{1}{s^2} = \frac{20}{10k}$$

$$= \frac{2}{k}$$

want k as large as possible