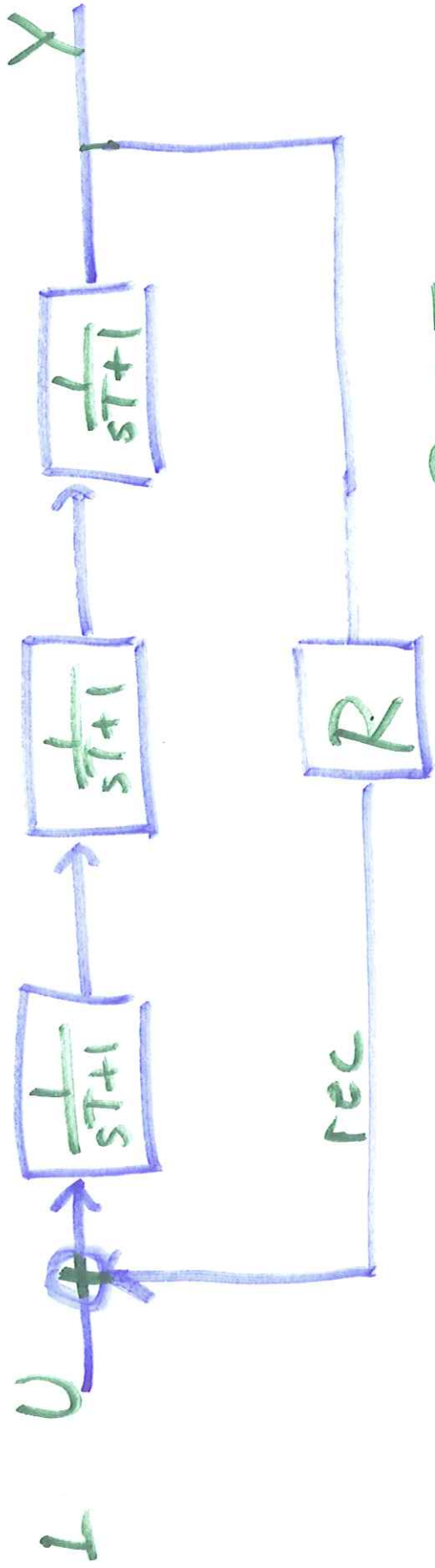


①



$50\% \Rightarrow R=0.5$

input	rec
1	0.5
1.5	0.75
1.75	0.875
1.875	

↓ 2

since

$$\sum_{k=0}^{\infty} a^k = \frac{1}{1-a}$$

$$0 < a < 1$$

2

final ~~theorem~~ value theorem

$$\lim_{t \rightarrow \infty} f(t) \Leftrightarrow \lim_{s \rightarrow 0} s \cdot F(s) \Rightarrow$$

assume step input $\frac{1}{s}$

$$\lim_{s \rightarrow \infty} \frac{1}{s} \cdot f(s)$$