

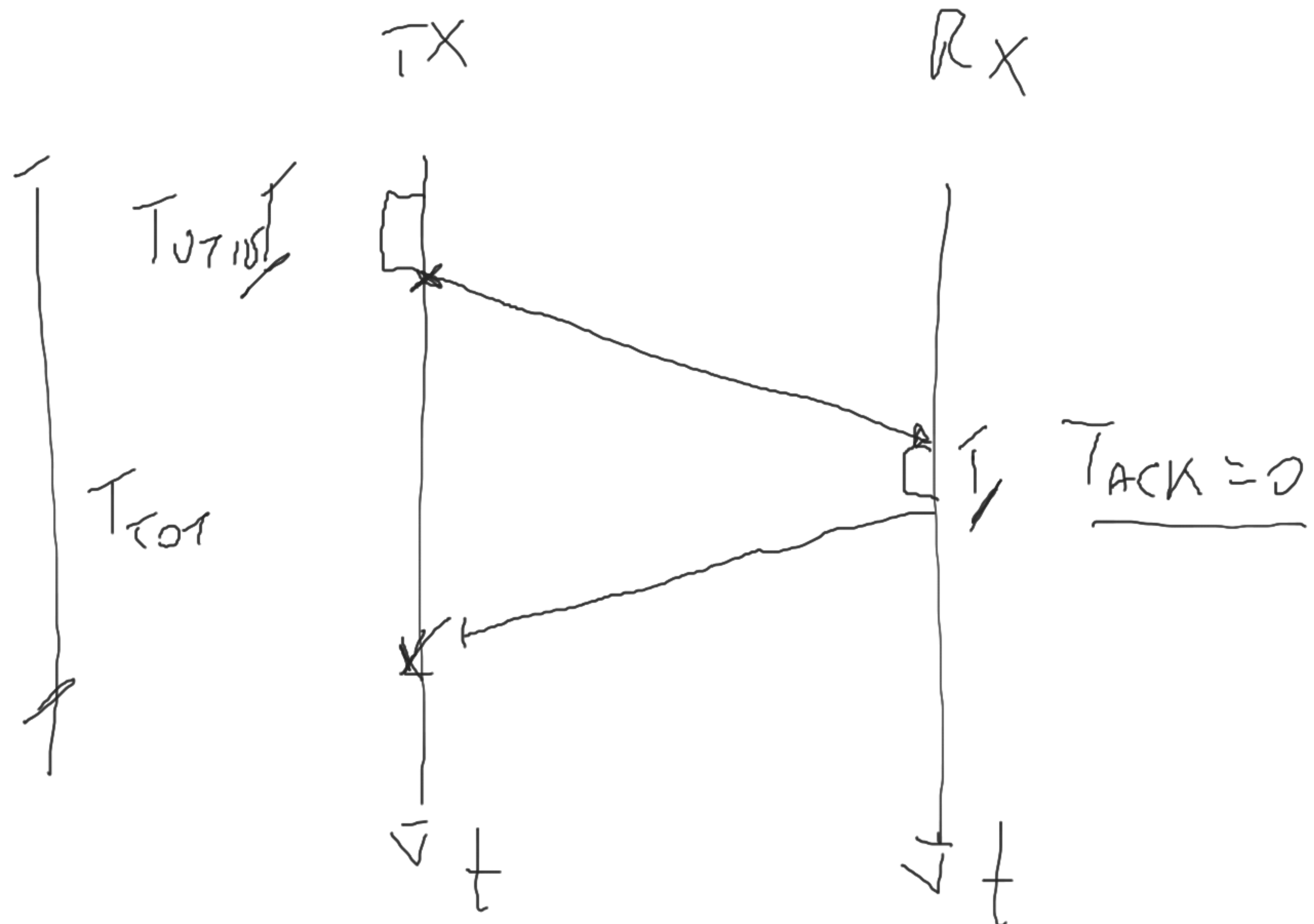
$$C = 1 \text{ Mbps}$$

$$d_{\text{e2e}} = 250 \text{ ms}$$

$$L = 2000 \text{ bit}$$

$$W_{\text{min}} = ?$$

$$U_{\text{sw}} = ?$$



$$V_{SW} = \frac{L}{\frac{L}{C} + 2d_{\text{err}}} =$$

$$= \frac{\frac{2000}{10^6}}{\frac{2000}{10^6} + 2 \cdot 250 \cdot 10^{-3}} = \frac{2 \cdot \cancel{10^{-3}}}{2 \cdot \cancel{10^{-3}} + 500 \cdot \cancel{10^{-3}}}$$

$$U_{SW} = \frac{2}{502}$$

$$U_{GBN} = W U_{SW} = 1$$

$$W = \frac{1}{U_{SW}} = \frac{502}{2} = 251$$

$$T_{TX} = T$$

T_X



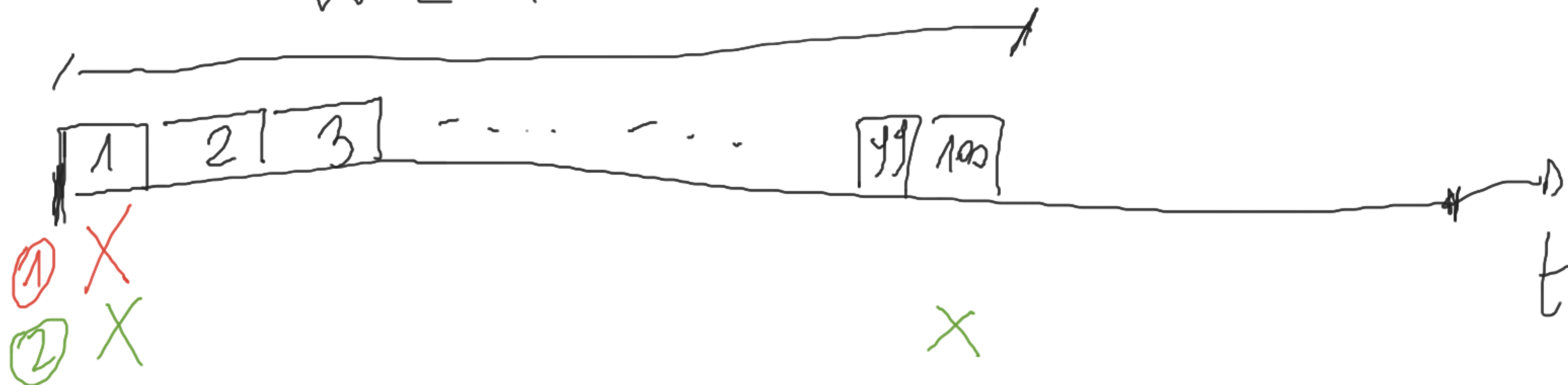
$$T_{\text{exe}} = 24T \quad \text{RX}$$

$$T_{ACK} = T$$

GBN

$$RTT = 100T$$

$$W = 100$$



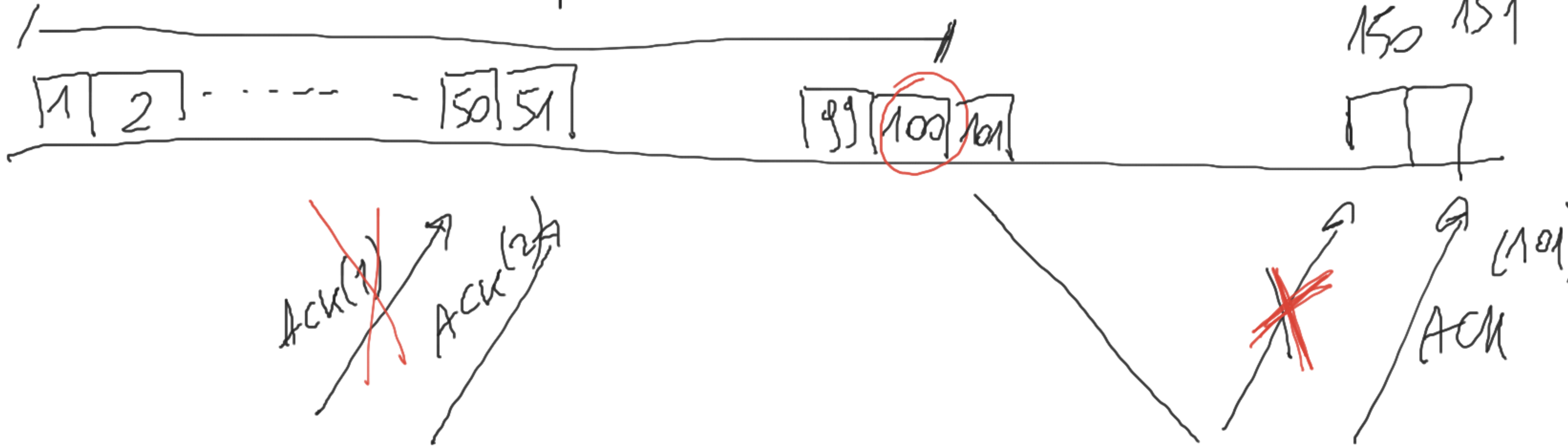
①

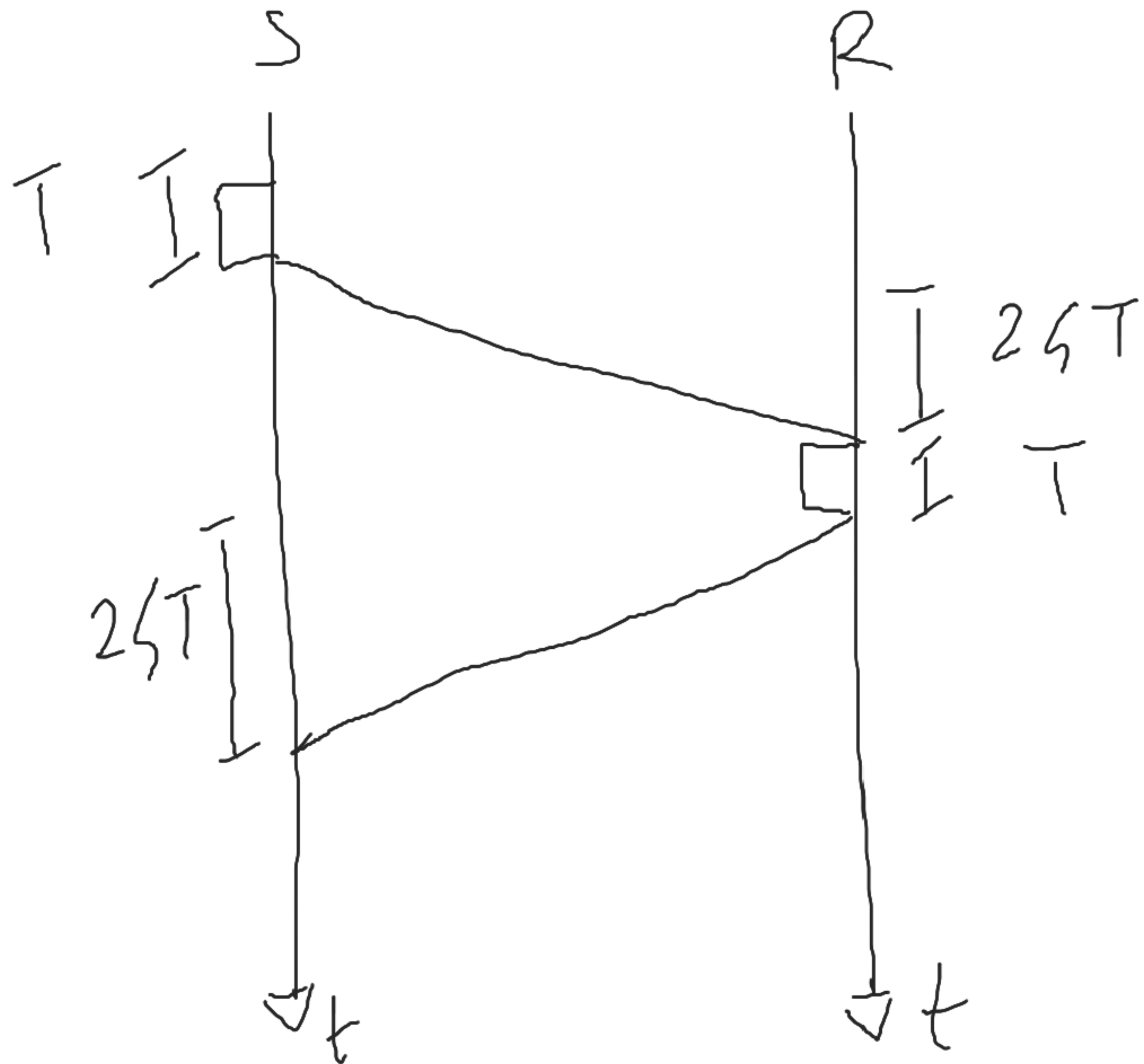
100

②

100

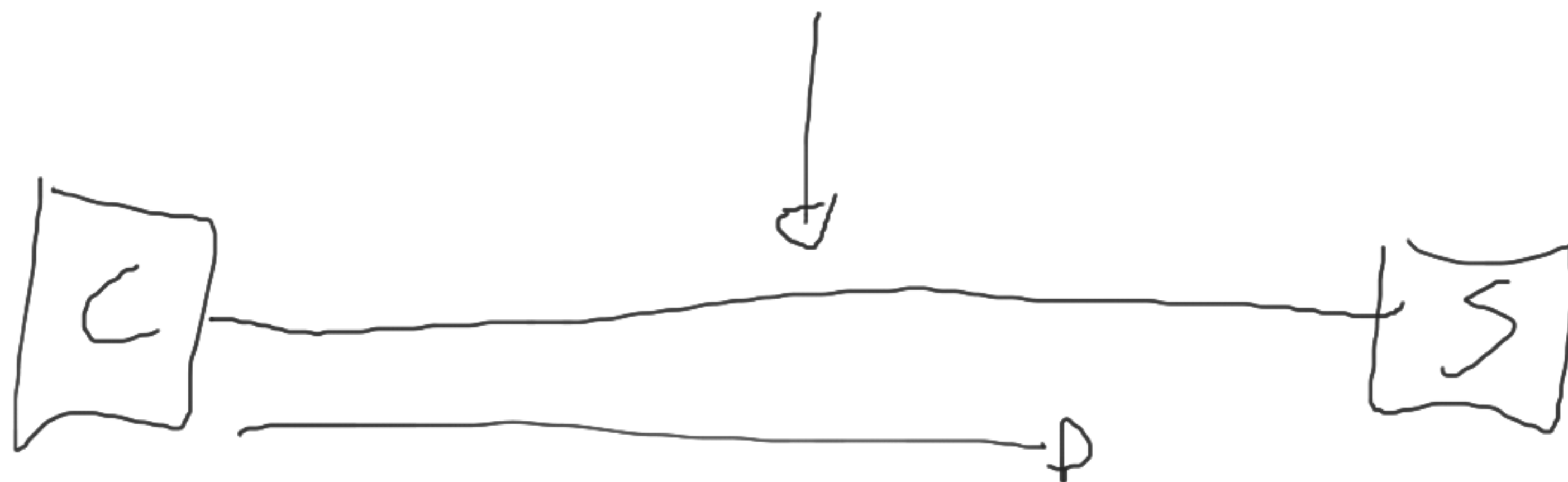
RTT





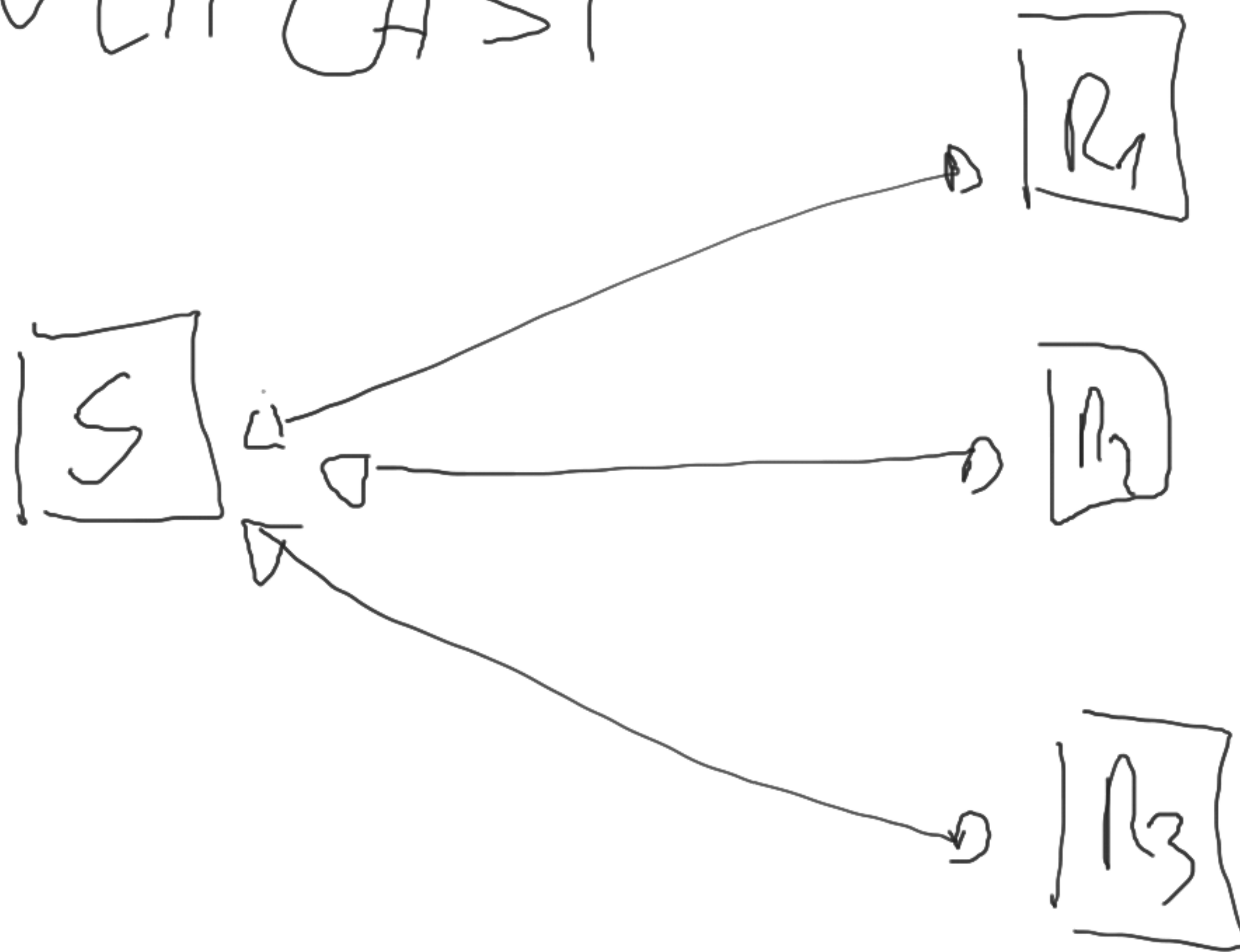
$50T$

CONNECTION
TCP



FULL DUPLEX

MULTICAST



①

S

R

②

S

R

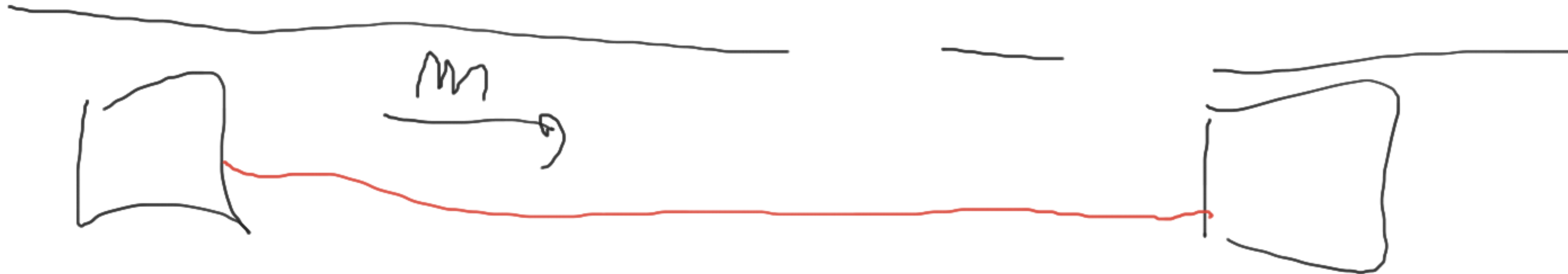
③

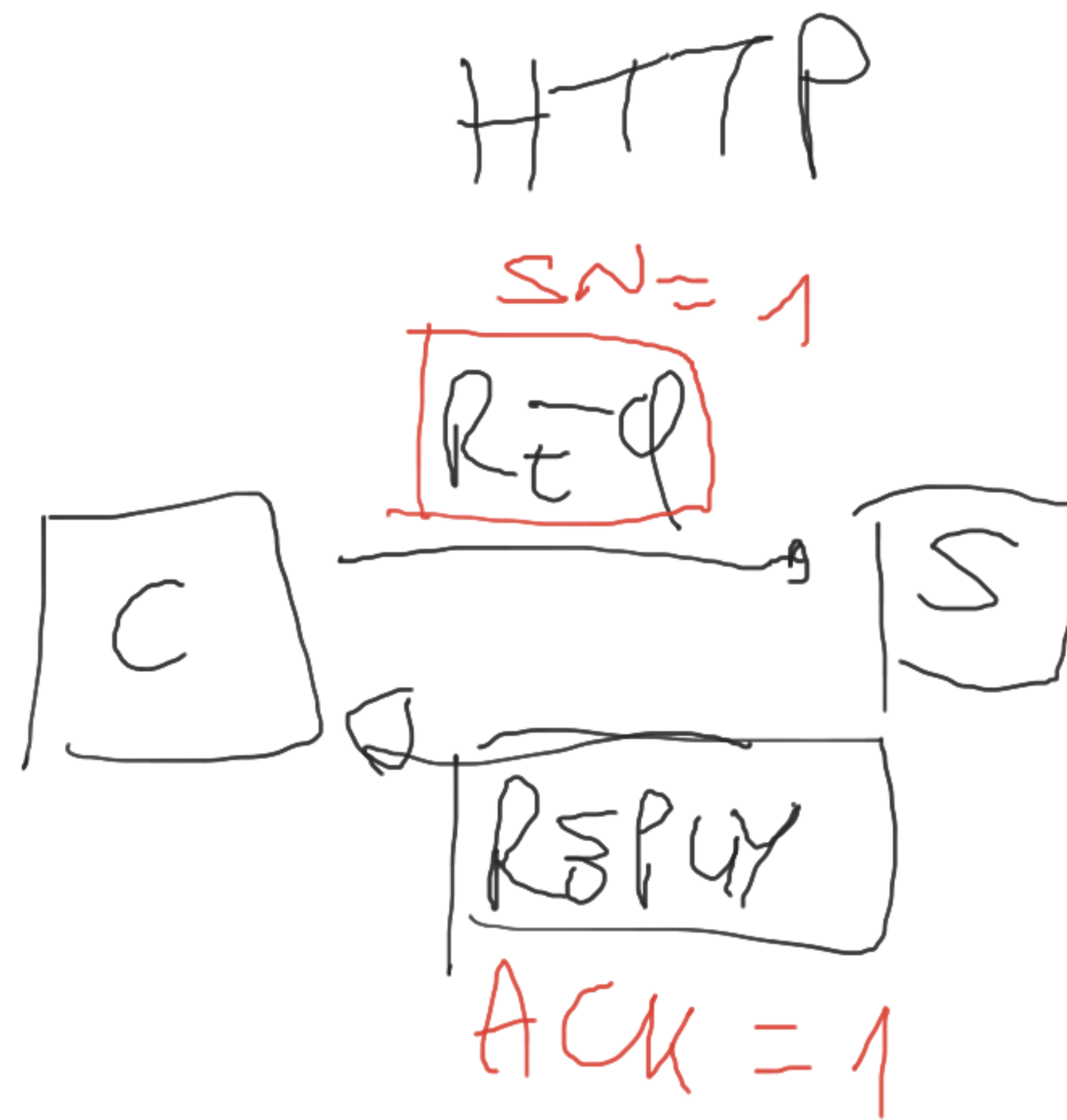
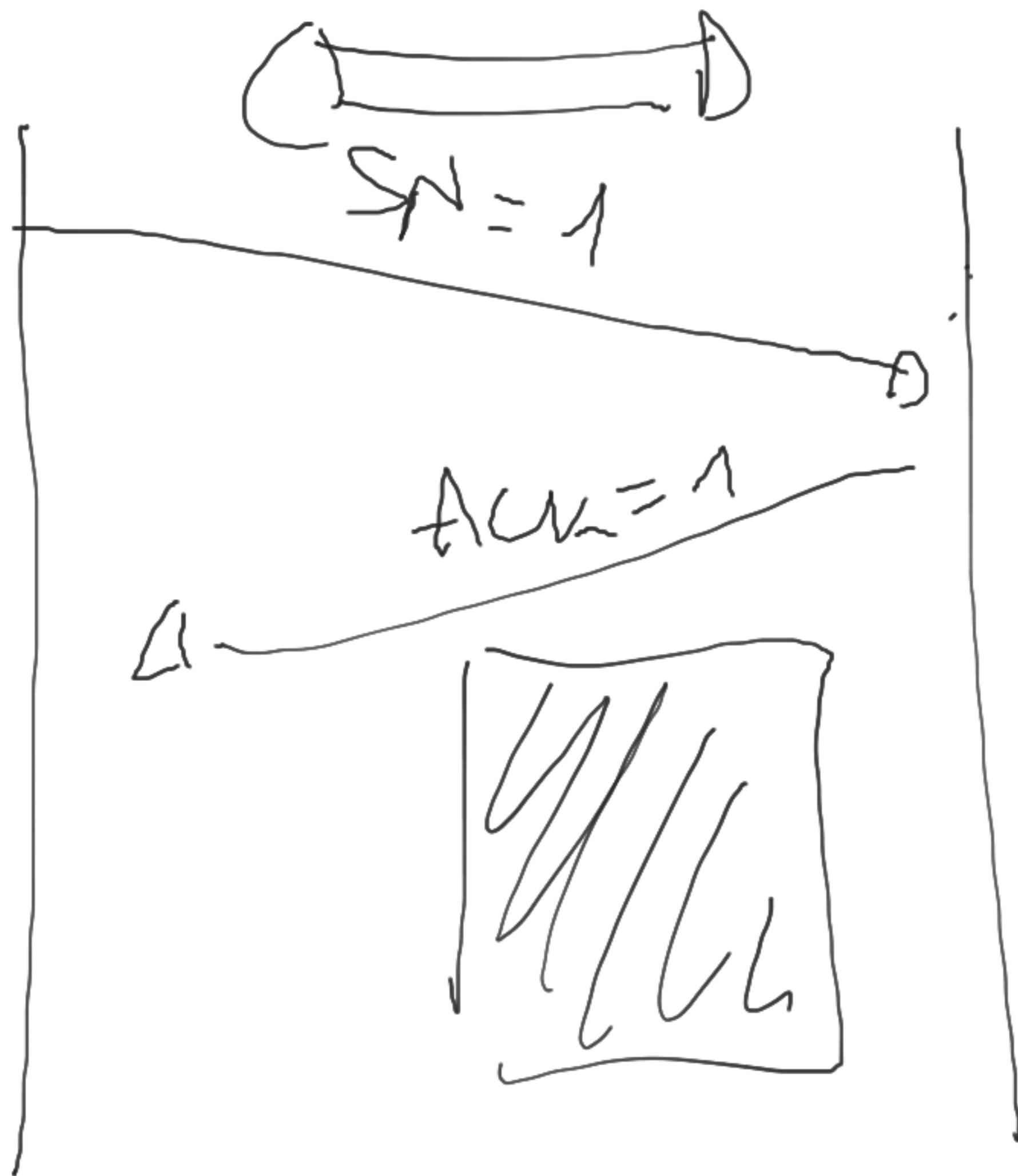
m

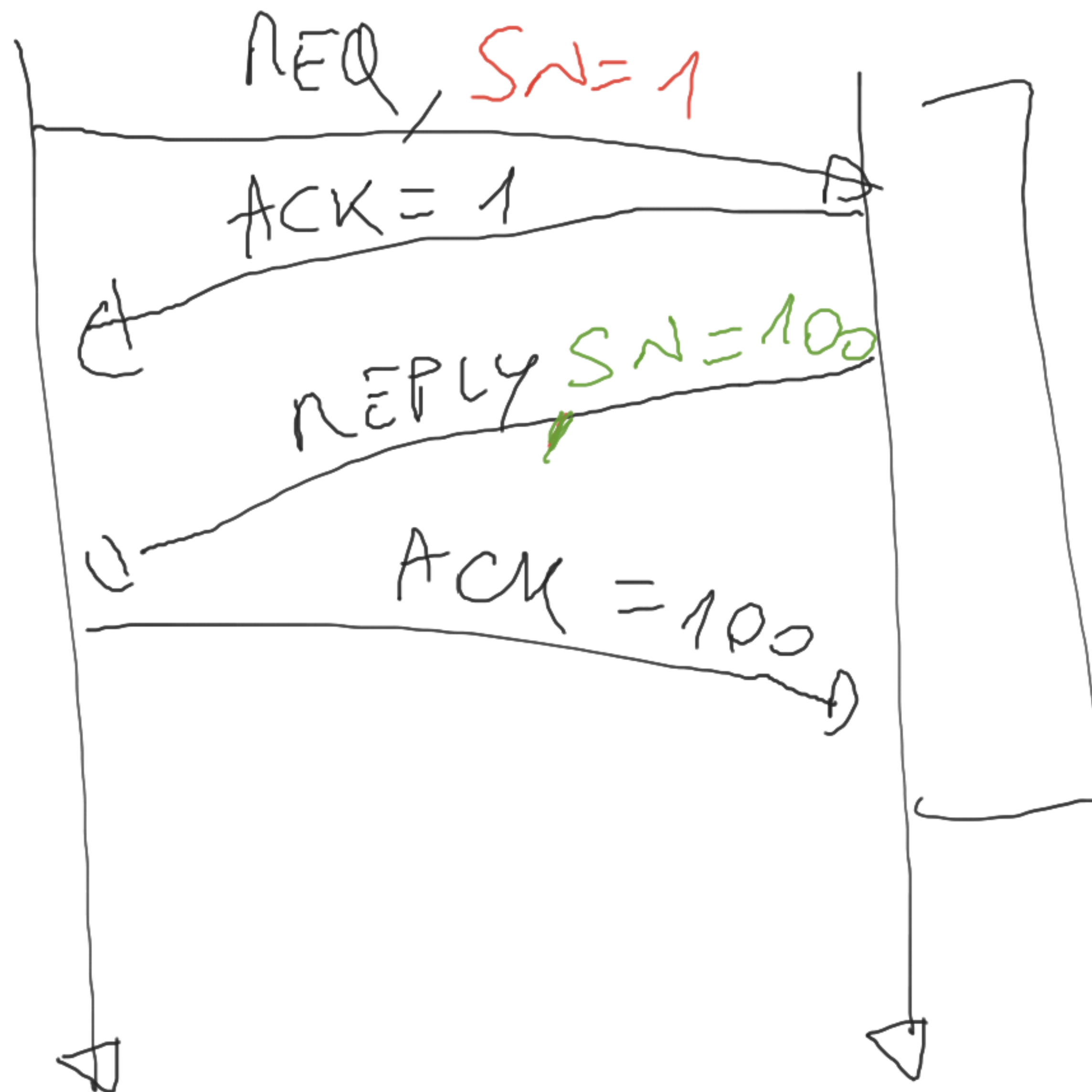
CONN REQ

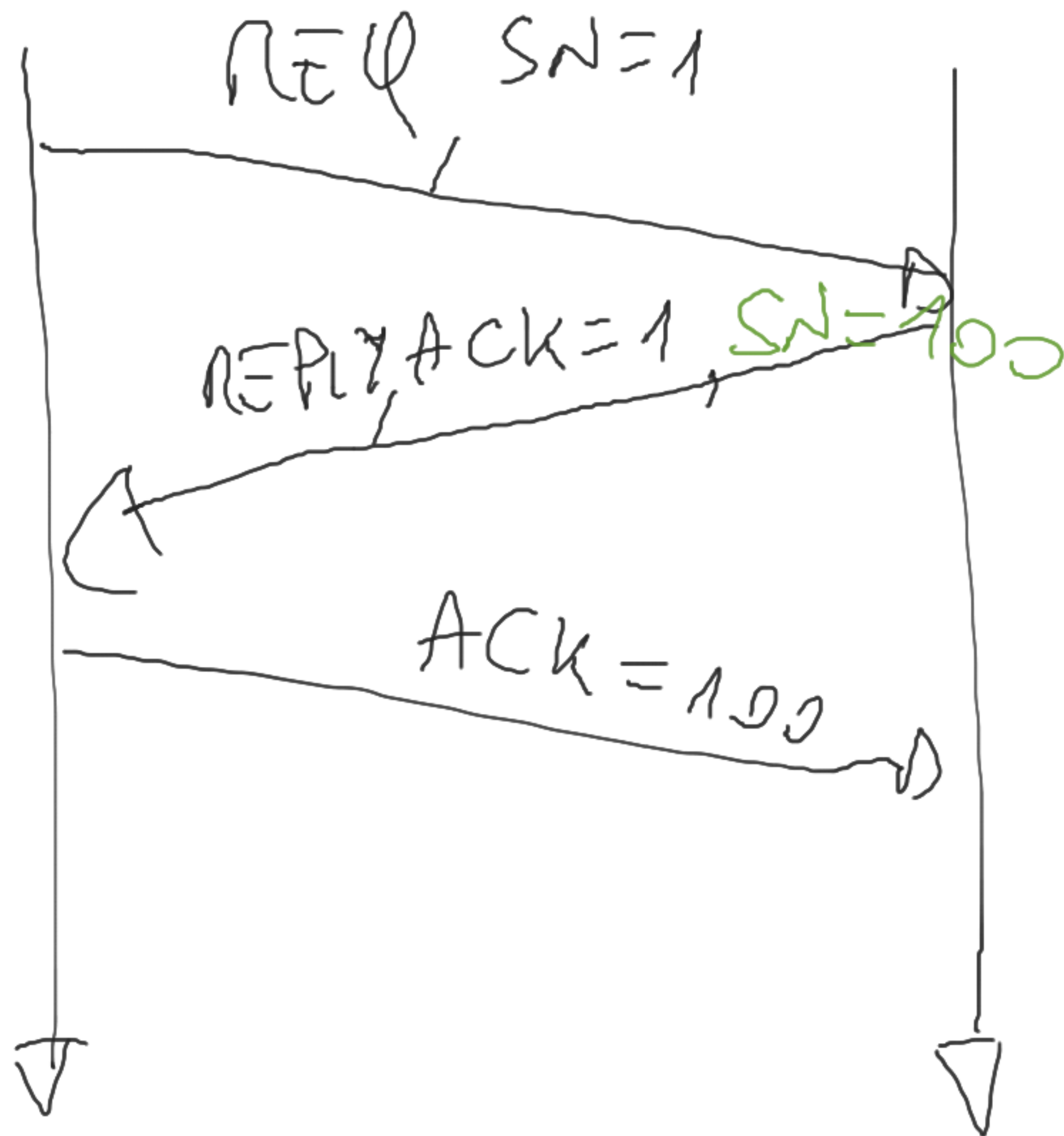


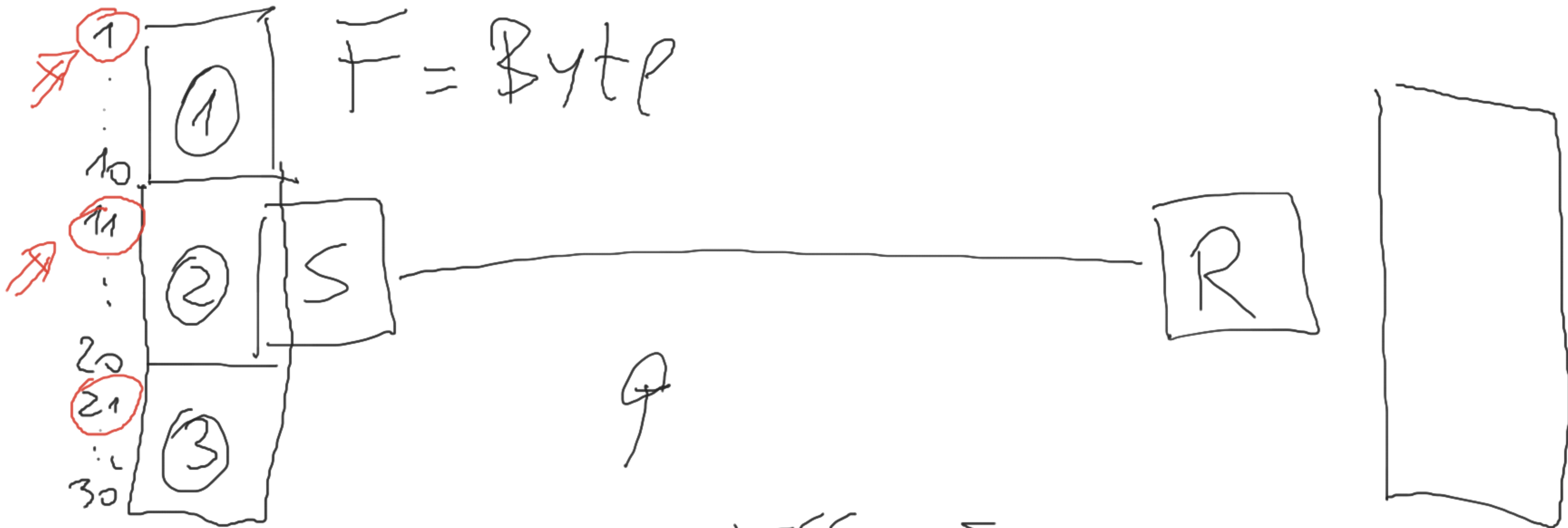
CONN ESTAB











9
connection
TCP