1) Quelle Q3

Link1: $t_x = \dfrac{1500 \text{ Bytes}}{300 \text{ kb kbps}} = \dfrac{12\,000 \text{ Bit}}{300\,000 \text{ bps}} = 0{,}04\,s = \cancel{1000} \; 40 \text{ ms}$

Link2: $t_x = \dfrac{1500 \text{ Byte}}{500 \text{ kbps}} = \dfrac{12\,000 \text{ Bit}}{500\,000 \text{ bps}} = 0{,}024\,s = \cancel{2100} \; 24 \text{ ms}$

Link 3: $t_x = \dfrac{1500 \text{ Byte}}{400 \text{ kbps}} = \dfrac{12\,000 \text{ Bit}}{400\,000 \text{ bps}} = 0{,}03\,s = \cancel{3000} \; 30 \text{ ms}$

Link 4: $t_x = \dfrac{1500 \text{ Byte}}{300 \text{ kbps}} = \dfrac{12\,000 \text{ Bit}}{300\,000 \text{ bps}} = 0{,}04\,s = \cancel{1000} \; 40 \text{ ms}$

$$T_{E2E}(1) = T_{e_1}(1) + T_{e_2}(1) + T_{e_3}(1) + T_4(1)$$

$$= 40 \text{ ms} + 20\,ms + 24 \text{ ms} + 6\,ms + 30 \text{ ms} + 10 \text{ ms}$$
$$+ 40 \text{ ms} + 20 \text{ ms}$$
$$= \cancel{123456 \text{ ms}} \; 190 \text{ ms}$$