

2.2

$$R = \frac{R_1 R_2}{R_1 + R_2}$$

 $R_1 \rightarrow 1 \text{ ohm per second}$
 $R_2 \rightarrow 1,5 \text{ ohm per second}$

$$R_1 = 50 \Omega$$

$$R_2 = 75 \Omega$$

$$R = f(R_1, R_2)$$

$$\frac{dR}{dt} = \frac{\partial R}{\partial R_1} \cdot \frac{dR_1}{dt} + \frac{\partial R}{\partial R_2} \cdot \frac{dR_2}{dt} \dots \textcircled{1}$$

$$\frac{dR_1}{dt} = +1 \Omega$$

$$\frac{dR_2}{dt} = +1,5 \Omega$$

$$R_1 = 50 \Omega$$

$$R_2 = 75 \Omega$$

$$R = \frac{R_1 R_2}{R_1 + R_2} \leftarrow \text{PRODUCT RULE}$$

$$\frac{\partial R}{\partial R_1} =$$