

$$P_1: \frac{\partial J}{\partial x} = \frac{\partial J}{\partial y} \times \frac{\partial y}{\partial z} \times \frac{\partial z}{\partial x}.$$

$$\frac{\partial J}{\partial w} = \frac{\partial J}{\partial y} \cdot \frac{\partial y}{\partial z} \times \frac{\partial z}{\partial w} = \frac{\partial J}{\partial z} \times \chi.$$

$$\frac{\partial J}{\partial b} = \frac{\partial J}{\partial y} \cdot \frac{\partial y}{\partial z} \times \frac{\partial z}{\partial b} = \frac{\partial J}{\partial z}$$