

$$\mathbb{H} \triangleleft \mathbb{1} = \frac{{}_2\mathbb{H} \leftarrow \mathbb{1}}{\overbrace{(\mathbb{h} \times \mathbb{h}) (\mathbb{h} \times \mathbb{h})} \mathbb{1} = \mathbb{h} \times (\mathbb{h} \mathbb{h})}$$

$$\mathbb{H} \triangleleft \mathbb{1} = \frac{\mathbb{H} \leftarrow \mathbb{1}}{e\mathbb{1} = 0}$$

$$\mathbb{H} \triangleleft \mathbb{1} \xleftarrow{d_1} \mathbb{H} \triangleleft \mathbb{1}$$

$$\mathbb{H} \triangleleft \mathbb{1} \xleftarrow{d_1} \mathbb{H} \triangleleft \mathbb{1}$$

$$\overbrace{(\mathbb{h}_1 \mathbb{h}_2)} d\mathbb{1} = \overbrace{(\mathbb{h}_1 \mathbb{h})} d\mathbb{1} = \mathbb{h} \times \overbrace{(\mathbb{h}_1 \mathbb{1})} - \overbrace{(\mathbb{h} \times \mathbb{h}_1)} \mathbb{1} + \mathbb{h} \mathbb{1}$$