

$$\mathbb{H}_{\infty} \triangleleft \mathbb{H} \triangleleft J = \begin{cases} \mathbb{H} \xrightarrow{\mathfrak{r}\mathfrak{h}} \mathbb{H} \times \mathbb{H} \triangleleft J \\ \backslash \times \mathfrak{r}\mathfrak{h} = / \end{cases}$$

$$\mathbb{H} \times \mathbb{H} \xrightarrow{\mathfrak{r}\mathfrak{h}} \mathbb{H} \times J$$

$$\mathfrak{r}\mathfrak{h} \times \mathfrak{r}\mathfrak{h} = \int_{d\mathfrak{h}}^{\mathbb{H}} \mathfrak{h} \mathfrak{r}\mathfrak{h} \times \mathfrak{h} \mathfrak{r}\mathfrak{h}$$