

$$\mathbb{H} \begin{array}{c} \triangleleft \\ \infty \\ \hline \end{array} \mathbb{C} \otimes \mathbb{C} \begin{array}{c} \triangleleft \\ 1 \\ \hline \end{array} \mathbb{H} \xrightarrow{\quad \sphericalangle \quad} \mathbb{H} \begin{array}{c} \triangleleft \\ 1 \\ \hline \end{array} \mathbb{C} \otimes \mathbb{C} \begin{array}{c} \triangleleft \\ \infty \\ \hline \end{array} \mathbb{H}$$

$$\begin{array}{ccc} \downarrow & & \downarrow \\ \mathbb{U} \begin{array}{c} \triangleleft \\ \hline \end{array} \mathbb{H} \begin{array}{c} \triangleleft \\ 2 \\ \hline \end{array} \mathbb{C} & \xrightarrow{\quad \sphericalangle \quad} & \mathbb{U} \begin{array}{c} \triangleleft \\ \hline \end{array} \mathbb{H} \begin{array}{c} \triangleleft \\ 2 \\ \hline \end{array} \mathbb{C} \end{array}$$

$$\mathbb{H} \begin{array}{c} \triangleleft \\ 0 \\ \hline \end{array} \mathbb{C} \otimes \mathbb{C} \begin{array}{c} \triangleleft \\ 1 \\ \hline \end{array} \mathbb{H} \xrightarrow{\quad \sphericalangle \quad} \mathbb{H} \begin{array}{c} \triangleleft \\ 1 \\ \hline \end{array} \mathbb{C} \otimes \mathbb{C} \begin{array}{c} \triangleleft \\ \infty \\ \hline \end{array} \mathbb{H}$$

$$\begin{array}{ccc} \downarrow & & \downarrow \\ \mathbb{U} \begin{array}{c} \triangleleft \\ \hline \end{array} \mathbb{H} \begin{array}{c} \triangleleft \\ 2 \\ \hline \end{array} \mathbb{C} & \xrightarrow{\quad \sphericalangle \quad} & \mathbb{U} \begin{array}{c} \triangleleft \\ \hline \end{array} \mathbb{H} \begin{array}{c} \triangleleft \\ 2 \\ \hline \end{array} \mathbb{C} \end{array}$$

$$\begin{array}{ccccccccc} \mathbb{H} \begin{array}{c} \triangleleft \\ 0 \\ \hline \end{array} \mathbb{C} & \xrightarrow{\quad \sqcap \quad} & \mathbb{H} \begin{array}{c} \triangleleft \\ \infty \\ \hline \end{array} \mathbb{C} & \xrightarrow{\quad M \quad} & \mathbb{U} \begin{array}{c} \triangleleft \\ \hline \end{array} \mathbb{H} \begin{array}{c} \triangleleft \\ 2 \\ \hline \end{array} \mathbb{C} & \xleftarrow{\quad C \quad} & \mathbb{C} \begin{array}{c} \triangleleft \\ -m \\ \hline \end{array} \mathbb{H} & \xleftarrow{\quad \sqcup \quad} & \mathbb{C} \begin{array}{c} \triangleleft \\ m \\ \hline \end{array} \mathbb{H} \\ \downarrow \sphericalangle & & \downarrow \sphericalangle & & \downarrow \sphericalangle & & \downarrow \sphericalangle & & \downarrow \sphericalangle \\ \mathbb{H} \begin{array}{c} \triangleleft \\ 1 \\ \hline \end{array} \mathbb{C} & \xrightarrow{\quad \sqcap \quad} & \mathbb{H} \begin{array}{c} \triangleleft \\ -m \\ \hline \end{array} \mathbb{C} & \xrightarrow{\quad \hat{M} \quad} & \mathbb{U} \begin{array}{c} \triangleleft \\ \hline \end{array} \mathbb{H} \begin{array}{c} \triangleleft \\ 2 \\ \hline \end{array} \mathbb{C} & \xleftarrow{\quad \hat{C} \quad} & \mathbb{C} \begin{array}{c} \triangleleft \\ \infty \\ \hline \end{array} \mathbb{H} & \xleftarrow{\quad \sqcup \quad} & \mathbb{C} \begin{array}{c} \triangleleft \\ m \\ \hline \end{array} \mathbb{H} \end{array}$$