$$\mathcal{K} : \Gamma \Downarrow \neg rght(b) :: \qquad \mathcal{K} : \Gamma \Downarrow \neg rght(a) ::$$

$$\mathcal{K} : \Gamma \Uparrow \qquad \mathcal{K} : \Gamma \Uparrow$$

$$\mathcal{K} : \Gamma \Uparrow \neg rght(b) :: \qquad \mathcal{K} : \Gamma \Uparrow \neg rght(a) ::$$

$$\mathcal{K} : \Gamma \Downarrow \neg lft(b) :: \qquad \mathcal{K} : \Gamma \Downarrow !^{r} \neg rght(b) :: \qquad \mathcal{K} : \Gamma \Downarrow \neg lft(a) :: \qquad \mathcal{K} : \Gamma \Downarrow !^{r} \neg rght(a) ::$$

$$\mathcal{K} : \Gamma \Uparrow \qquad \mathcal{K} : \Gamma \Uparrow \qquad \mathcal{K} : \Gamma \Uparrow \qquad \mathcal{K} : \Gamma \Uparrow$$

$$\mathcal{K} : \Gamma \Uparrow ?^{l} lft(b) :: \qquad \mathcal{K} : \Gamma \Uparrow ?^{r} rght(b) :: \qquad \mathcal{K} : \Gamma \Uparrow ?^{l} lft(a) :: \qquad \mathcal{K} : \Gamma \Uparrow ?^{r} rght(a) ::$$

$$\mathcal{K} : \Gamma \Downarrow ?^{l} lft(b) :: \qquad \mathcal{K} : \Gamma \Downarrow !^{l} ?^{r} rght(b) :: \qquad \mathcal{K} : \Gamma \Downarrow ?^{l} lft(a) :: \qquad \mathcal{K} : \Gamma \Downarrow !^{l} ?^{r} rght(a) ::$$

$$\mathcal{K} : \Gamma \Downarrow !^{l} ?^{r} rght(b) \otimes ?^{l} lft(b) :: \qquad \mathcal{K} : \Gamma \Downarrow !^{l} ?^{r} rght(a) \otimes ?^{l} lft(a) ::$$

$$\mathcal{K} : \Gamma \Uparrow \qquad \mathcal{K} : \Gamma \Uparrow$$

$$\mathcal{K} : \Gamma \Uparrow \neg lft(b) :: \qquad \mathcal{K} : \Gamma \Uparrow \neg lft(a) ::$$

$$\mathcal{K} : \Gamma \Downarrow !^{l} \neg lft(b) :: \qquad \mathcal{K} : \Gamma \Downarrow !^{l} \neg lft(a) ::$$

$$\mathcal{K} : \Gamma \Downarrow !^{l} \neg lft(a) \otimes !^{l} \neg lft(b) ::$$

$$\mathcal{K} : \Gamma \Uparrow$$

$$\mathcal{K} : \Gamma \Uparrow ?^{l} !^{r} \neg rght(b) ::$$

$$\mathcal{K} : \Gamma \Uparrow ?^{l} !^{r} \neg rght(a) :: ?^{l} !^{r} \neg rght(b) ::$$

$$\mathcal{K} : \Gamma \Uparrow ?^{l} !^{r} \neg rght(a) \parr ?^{l} !^{r} \neg rght(b) ::$$

$$\mathcal{K} : \Gamma \Uparrow !^{l} \neg lft(a) \otimes !^{l} \neg lft(b) :: ?^{l} !^{r} \neg rght(a) \parr ?^{l} !^{r} \neg rght(b) ::$$

$$\mathcal{K} : \Gamma \Uparrow !^{l} \neg lft(a) \otimes !^{l} \neg lft(b) \parr ?^{l} !^{r} \neg rght(a) \parr ?^{l} !^{r} \neg rght(b) ::$$

$$\mathcal{K} : \Gamma \Uparrow !^{l} \neg lft(a) \otimes !^{l} \neg lft(b) \parr ?^{l} !^{r} \neg rght(a) \parr ?^{l} !^{r} \neg rght(b) ::$$