

$$\neg \Box A, i$$

$$\downarrow$$

$$\Diamond \neg A, i$$

$$\neg \Diamond A, i$$

$$\downarrow$$

$$\Box \neg A, i$$

Both need to be true $\begin{cases} \Box A, i \\ iRj \end{cases}$

$$\downarrow$$

$$A, j$$

$$\Diamond A, i$$

$$\downarrow$$

j has to be new $\begin{cases} iRj \\ A, j \end{cases}$

$$(A \supset B), i$$

$$\swarrow \quad \searrow$$

$$\neg A, i \quad B, i$$

$$(A \vee B), i$$

$$\swarrow \quad \searrow$$

$$A, i \quad B, i$$

$$\neg(A \wedge B), i$$

$$\swarrow \quad \searrow$$

$$\neg A, i \quad \neg B, i$$

$$\neg(A \supset B), i$$

$$\downarrow$$

$$A, i$$

$$\neg B, i$$

$$\neg(A \vee B), i$$

$$\neg A, i$$

$$\neg B, i$$

$$(A \equiv B), i$$

$$\swarrow \quad \searrow$$

$$A, i \quad \neg A, i$$

$$B, i \quad \neg B, i$$

$$(\neg \neg A), i$$

$$A, i$$

$$(A \wedge B), i$$

$$A, i$$

$$B, i$$

$$\neg(A \equiv B), i$$

$$\swarrow \quad \searrow$$

$$\neg A, i \quad A, i$$

$$B, i \quad \neg B, i$$