More Practice Modal Problems.

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Note, there are practice problems in 2012 folder.

1 Exercise

(1) $\Box(A \cdot B) \equiv \Diamond(B \supset \sim C)$

(2) $\sim (\Diamond \sim A \cdot (\Box(B \equiv C)))$

(3) $\Diamond A \supset \Box B$

$[\therefore \Diamond \sim C$

2 Exercise

(INVALID)

(1) $\Box(A \supset \Diamond(B \cdot C))$

(2) $\sim C \equiv (\Diamond C)$

$[\therefore (\sim \Diamond(A \cdot B)) \supset \sim A$

3 Exercise

(1) $\Box[A \supset \Box(B \equiv \sim C)]$

(2) $[\Diamond(D \equiv C)] \supset [\Box B \supset \Diamond A]$

(3) $[\Diamond \sim B] \supset [\Box \sim D]$

$[\therefore [\Diamond(\sim D \cdot C)] \vee (\Box \sim C)$

4 Exercise

(1) $(A \supset F) \vee \Diamond[A \equiv \Diamond(F \cdot \sim D)]$

(2) $\Box(F \supset D)$

(3) $\Diamond F \supset \Box \sim (A \cdot D)$

$[\therefore \Diamond \sim A$