

$$O(B) = \frac{0.5}{1-0.5} = 1.0$$

$$O(B|A) = 1.6 \times 1.0 = 1.6$$

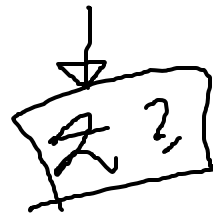
$$\boxed{\neg P(x) \vee Q(x, y)}$$

$$\begin{aligned} &= \exists x (P(x) \vee Q(x)) \rightarrow \exists x (P(x) \vee Q(x)) \\ &= \exists x (\neg P(x) \wedge \neg Q(x)) \vee \exists x (P(x) \vee Q(x)) \\ &= \exists x \{ (\neg P(x) \vee P(x)) \wedge \neg Q(x) \vee (\neg P(x) \wedge \neg Q(x)) \vee Q(x) \} \\ &= \underline{\exists x (\neg Q(x) \vee \neg P(x))} \end{aligned}$$

$$\begin{aligned}
& \forall x \forall y (\neg P(x) \vee Q(x, y)) \rightarrow \exists y \exists z (P(y) \wedge Q(y, z)) \\
&= \forall x \forall y (P(x) \wedge \neg Q(x, y) \vee \exists y \exists z (P(y) \wedge Q(y, z))) \\
&= \forall x \forall y (P(x) \wedge \neg Q(x, y) \vee (P(y) \wedge Q(y, h(x, y)))) \\
&= \underline{(P(x) \wedge \neg Q(x, y) \vee P(y) \vee (P(x) \wedge \neg Q(x, y) \vee Q(y, h(x, y))))}
\end{aligned}$$

$$\begin{aligned}
& \forall x (\neg P(x) \vee Q(A)) \rightarrow \forall x (\neg P(x) \vee Q(A)) \\
&= \forall x (P(x) \wedge \neg Q(A) \vee (\neg P(x) \vee Q(A))) \\
&= (P(x) \wedge \neg Q(A) \vee \neg P(x)) \vee (P(x) \wedge \neg Q(A) \vee Q(A)) \\
&= \underline{\neg Q(A) \vee P(x)}
\end{aligned}$$

$$P(x, f(x), z) \quad \vee \quad \neg P(g(x), \underbrace{f(g(x))}_{\downarrow}, z)$$



- ① $\neg \text{Horse}(x) \vee \neg \text{Dog}(y) \vee \text{Faster}(x, y)$
- ② $\text{Greyhound}(A)$
- ③ $\neg \text{Rabbit}(z) \vee \text{Faster}(y, z)$
- ④ $\text{Horse}(\cancel{A})$
- ⑤ $\text{Rabbit}(\cancel{A})$
- ⑥ $\neg \text{Greyhound}(y) \vee \text{Dog}(y)$
- ⑦ $\neg \text{Faster}(x, y) \vee \neg \text{Faster}(y, z) \vee \text{Faster}(x, z)$
- (②, ⑥) $\text{Dog}(y) \dots$ ⑧
- (①, ⑧) $\neg \text{Horse}(x) \vee \text{Faster}(x, y) \dots$ ⑨
- (⑦, ⑨) $\neg \text{Horse}(x) \vee \text{Faster}(y, z) \vee \text{Faster}(x, z) \dots$ ⑩
- (③, ⑩) $\neg \text{Horse}(x) \vee \neg \text{Rabbit}(z) \vee \text{Faster}(x, z) \dots$ ⑪
- ⑪, ④, ⑤ $\text{Faster}(\cancel{A}, \cancel{A})$

$\text{Faster}(\cancel{A}, \cancel{A}) \text{ Faster}(\cancel{A}, \cancel{A})$

NIL

한정된 양식에 의해
공식은 공리

✓