

First-Order Logic for-kl-3

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1 fol-kr-3

1. $\text{Wrote}(\text{Gershwin}, \text{TheManILove})$
2. $\neg \text{Wrote}(\text{Gershwin}, \text{EleanorRigby})$
3. $\text{Wrote}(\text{Gershwin}, \text{TheManILove}) \vee \text{Wrote}(\text{McCartney}, \text{TheManILove})$
4. $\exists x \text{ Wrote}(\text{Joe}, x)$
5. $\exists x \text{ CopyOf}(x, \text{Revolver}) \wedge \text{Owns}(\text{Joe}, x)$
6. $\forall x \text{ Sings}(\text{McCartney}, x, \text{Revolver}) \rightarrow \text{Wrote}(\text{McCartney}, x)$
7. $\neg (\exists x \text{ Wrote}(\text{Gershwin}, x) \wedge \exists y \text{ Sings}(y, x, \text{Revolver}))$
8. $\forall x \text{ Wrote}(\text{Gershwin}, x) \rightarrow \exists y \exists z (y, x, z)$
9. $\exists x \forall y \text{ Wrote}(\text{Joe}, y) \rightarrow \exists z \text{ Sings}(z, y, x)$
10. $\exists x \text{ CopyOf}(x, y) \wedge \exists y \text{ Owns}(\text{Joe}, x) \wedge \exists z \text{ Sings}(\text{BHoliday}, \text{TheManILove}, y)$
11. $\forall x (\exists y \text{ Sings}(\text{McCartney}, y, x)) \rightarrow \exists z \text{ CopyOf}(z, x) \wedge \text{Owns}(\text{Joe}, z)$
12. $\forall w (\forall x \forall y \text{ Sings}(y, x, w) \rightarrow \text{Sings}(\text{BHoliday}, x, w)) \rightarrow \exists z \text{ CopyOf}(z, w) \wedge \text{Owns}(\text{Joe}, z)$