**Who killed Tuna?**

Knowledge Base:

Loves(Jack, y) ∧ Animal(y)

Loves(x, y) ∧ Animal(y) 🡪 ¬Kills(x, y)

Kills(Jack, Cat(Tuna)) ∨ Kills(Curiosity , Cat(Tuna))

Cat(Tuna)

CNF conversion:

Loves(x, y) ∧ Animal(y) 🡪 ¬Kills(x, y) ≡ ¬[ Loves(x, y) ∧ Animal(y) ] ∨ ¬Kills(x, y)

α = Kills(Curiosity , Cat(Tuna))

¬α = ¬Kills(Curiosity , Cat(Tuna))

KB ∧ ¬α ≡

Loves(Jack, y) ∧ Animal(y) ∨ ¬[ Loves(x, y) ∧ Animal(y) ] ∨ ¬Kills(x, y) ∨ Kills(Jack, Cat(Tuna)) ∨ Kills(Curiosity , Cat(Tuna)) ∨ ¬Kills(Curiosity , Cat(Tuna))

Loves(Jack, y) ∧ Animal(y) ∨ ¬[ Loves(x, y) ∧ Animal(y) ] ∨ ¬Kills(x, y) ∨ Kills(Jack, Cat(Tuna))

x = Jack

y = Cat(Tuna)

Loves(Jack, Cat(Tuna)) ∧ Animal(Cat(Tuna)) ∨ ¬[ Loves(Jack, Cat(Tuna)) ∧ Animal(Cat(Tuna)) ] ∨ ¬Kills(Jack, Cat(Tuna)) ∨ Kills(Jack, Cat(Tuna))

= {}

Thus we reject: ¬α = ¬Kills(Curiosity , Cat(Tuna))

But accept: α = Kills(Curiosity , Cat(Tuna))