1. 1. Anyone passing his history exams and winning the lottery is happy
2. 2. But anyone who studies or is lucky can pass all his exams
3. 3. John did not study but he is lucky
4. 4. Anyone who is lucky wins the lottery
5. 5. There exists a person who is wealthy

Prove by resolution that John is happy.

2. Jack owns a dog.
3. Every dog owner is an animal lover.
4. No animal lover kills an animal.
5. Either Jack or Curiosity killed the cat, who is named Tuna.

Prove by resolution that Curiosity kill the cat.

3.

GameX says it is criminal for a programmer to provide emulators to people. My friends don't have a GameX, but they use software EMULATOR1 that runs GameX games on their PC, which is written by SuperProgrammer, who is a programmer. Prove by resolution that that SuperProgrammer is a criminal.

4. Consider the following axioms:

1. All hounds howl at night.

2. Anyone who has any cats will not have any mice.

3. Light sleepers do not have anything which howls at night.

4. John has either a cat or a hound.

Prove by resolution that If John is a light sleeper, then John does not have any mice