Translate the following sentences into the language of predicate logic, as accurately as possible, and use variables for all quantified expressions.

Fx = x is a frog
Gx = x is green
Bx = x is big
Ox = x is orange
Px = x is poisonous

Example:
“There is a poisonous green frog who is big.”
\(\exists x (Fx \land (Gx \land Bx))\)

1. Some frogs are green and some are orange.

2. All big frogs are green.

3. If a frog is green, it isn’t orange.

4. None of the big frogs are orange or poisonous.

5. If no orange frog is big, then there aren’t any orange frogs.

6. Unless a frog is orange, it isn’t poisonous.

7. All big green frogs are non-poisonous.

8. No green frog is both big and poisonous.

9. Only orange frogs can be poisonous.

10. Not all frogs are orange; or green either, for that matter. (Tricky)