

Translate the following into predicate logic. (For categorical statements that involve pronouns like 'someone,' 'everyone,' etc. you may assume the domain of discourse to be people. In other words, translate these words as if they simply mean 'something,' 'everything,' etc.)

1. Rudi likes cheese.
2. Rudi likes cheese and nuts.
3. Rudi makes cheese.
4. Rudi loves cheese.
5. Some cheese is tasty.
6. Some cheese is smelly.
7. No smelly cheese is tasty.
8. Rebecca like smelly cheese.
9. Everyone likes at least one cheese.
10. Some people like all cheese.
11. Sam only likes grated cheese.
12. Sam doesn't make any smelly cheeses.
13. Sam buys cheese and sells cheese, but he doesn't make cheese.
14. If gorgonzola is better than cheddar and cheddar is better than brie, then gorgonzola is better than both cheddar and brie.
15. Cheese goes with wine but not pie.
16. If the cheese in the refrigerator is moldy, don't eat it.
17. Someone ate moldy cheese and died.
18. Anyone who eats moldy cheese is starving.
19. Anyone who does not like cheese has not tried gorgonzola.
20. There is someone in this room who does not eat moldy cheese
21. Sarah hit Butch.
22. Sarah hit a ball.
23. Sarah is not happy.
24. Sarah is a large monkey. (two properties here: large and monkey).
25. All monkeys are vicious.
26. If Sarah is a monkey, then Sarah is vicious.
27. Sarah bites a monkey only if a monkey bites Sarah.
28. Some but not all monkeys bite Sarah.
29. Sarah is a monkey and Sarah does not like bananas.
30. There is a monkey that does not like bananas.
31. There is at least one monkey that doesn't like bananas.
32. Something is rotten.
33. Something is rotten in Denmark.
34. If Hamlet is dead, then he is rotten.
35. Everything dead is rotten or dessicated.

36. Something is reticulated and variegated, but not corrugated.
37. Everything that is reticulated is neither variegated nor corrugated.
38. Mike is variegated but he is not a zebra.
39. Large monkeys only bite monkeys if they are small.
40. If a small monkey has a banana, then a large monkey gets a banana.
41. No zebra is not variegated.
42. Reticulated leaves have veins.
43. Every zebra has a mother and knows its mother. (you will not translate 'has a' as a relation here. You will just translate "has a mother" as "there exists something that is the mother of")
44. Only people are afraid of ghosts. (think of this one as follows: for all x and for all y, if x is a ghost and y is afraid of x, then x is a person.)
45. Some people are afraid of large pickles. (here you will specify both largeness and pickleness).
46. Mac's house is burning. (let O stand for 'owns')
47. Rafa collects red marbles. (translate this to mean that he collects all red marbles.)
48. Some hillbillies eat squirrels. (translate as if x is a squirrel then y eats x.)
49. There is a person that everyone knows who knows everyone. (assume domain of discourse is people.)
50. There is no greatest number. (assume domain of discourse is numbers.)
51. There is no set that has every set as a member. (assume domain of discourse is sets)