QUESTION 1  (10pts)

Describe SHORTLY 2 solutions to the Russell Paradox:

Consider the set A of all those sets X such that X is not a member of X. Clearly, A is a member of A if and only if A is not a member of A. So, if A is a member of A, the A is also not a member of A; and if A is not a member of A, then A is a member of A.

In any case, A is a member of A and A is not a member of A. CONTRADICTION!

Solution 1

Solution 2

QUESTION 2  (5pts)

Describe shortly the basic difference between classical and intuitionists’ mathematics
QUESTION 3 (5pts)

Translate a natural language sentence into corresponding propositional symbolic logic formula. Use symbols ¬, ∩, ⇒ for appropriate logical connectives.

SENTENCE is:

The fact that it is not true that at the same time sun is blue and 2+2 = 5 implies that sun is blue.