WRITE YOUR ANSWERS TO THE PROBLEMS BELOW ON THIS PAPER

8. “or” statements. I have a cat named Guigui. The following statement is, of course, true:

Donald Trump is President of the United States [POTUS] or Guigui is a black cat.

Given the fact the Trump is POTUS, and the fact that you don’t know the color of my cat, which of the following is a good, logically valid explanation of why this statement is true?
Comment on each sentence below, whether it is a good explanation or not (at least one of them is).

(a) In order for an “or” statement to be true, only one part must be true.
(b) In order for an “or” statement to be true, one part must be true.
(c) An “or” statement is true if one part of it is true.

SOLUTION. We want to explain why the given statement about DT and G is true. In order to do this, we want an explanation whose logical form is

IF blah blah blah, THEN the statement is true,

which is equivalent to

The statement is true IF blah blah blah.

The point is not, “in order for the statement to be true, then something must happen”.
The point is “IF something happens, then the statement is true”.

To be continued.

(a) ...