

1. (6pts) Consider the statement

If chatGPT learns logic, then I'm out of a job and all hell breaks loose.

a. Describe two distinctly different ways to interpret the expression above, based on the imprecision in our language (and lack of parentheses!). Which do you think that I meant?

1) The first interpretation could be that you being out of a job is a necessary condition for chatGPT to learn logic and all hell breaks loose.

2) You being out of a job and all hell breaking loose will follow from chatGPT learning logic.

I believe you meant the second interpretation.

b. Using the letters

- i. C - chatGPT learns logic
- ii. J - I'm out of a job
- iii. H - all hell breaks loose.

write the expression as a wff, using these statement letters (using your preferred interpretation from above).

$C \rightarrow (J \wedge H)$

c. Negate your wff from above, and interpret in terms of the original expression.

$(C \rightarrow (J \wedge H))' \leftrightarrow C \wedge (J \wedge H)' \leftrightarrow C \wedge (J' \vee H')$

→ chatGPT learns logic but either I don't lose my job or all hell will not break loose.

Well done

1. (6pts) Consider the statement

If (chatGPT learns logic)^A, then (I'm out of a job)^B and (all hell breaks loose)^C

a. Describe two distinctly different ways to interpret the expression above, based on the imprecision in our language (and lack of parentheses!). Which do you think that I meant?

You could mean $A \rightarrow (B \wedge C)$, or you might mean $(A \rightarrow B) \wedge C$. I think you probably meant the second one. I am guessing

(it's possible) all hell breaks loose because it's true that you lost your job ($A \rightarrow B$ was true). But you could also mean chatGPT learning logic causes B and C; I don't think all hell breaking loose would be a consequence of chatGPT learning logic, on its own.

b. Using the letters

i. C - chatGPT learns logic

ii. J - I'm out of a job

iii. H - all hell breaks loose.

write the expression as a wff, using these statement letters (using your preferred interpretation from above).

$$(C \rightarrow J) \wedge H$$

c. Negate your wff from above, and interpret in terms of the original expression.

$$\overline{(C \rightarrow J) \wedge H} \text{ becomes } \overline{(C \rightarrow J)} \vee \overline{H}$$

This would mean, chatGPT learning logic implies you're not out of a job, or all hell doesn't break loose.

$C \rightarrow J'$ is not the negation

of $C \rightarrow J$: $\overline{C \rightarrow J} \leftrightarrow \overline{C \wedge J'}$

1. (6pts) Consider the statement

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If chatGPT learns logic, then I'm out of a job and all hell breaks loose.

a. Describe two distinctly different ways to interpret the expression above, based on the imprecision in our language (and lack of parentheses!). Which do you think that I meant?

1) This can be interpreted as if it's able to learn logic, then you get out of a job and as a result of losing your job, all hell breaks loose.

2) The second way this can be interpreted is if chatGPT learns logic, then you get out of a job, and as a result of ChatGPT learning logic, all hell breaks loose.

→ meaning it is advancing quickly and far more bad things could come as result? ✓

b. Using the letters

i. C – chatGPT learns logic

ii. J – I'm out of a job

iii. H – all hell breaks loose.

write the expression as a wff, using these statement letters (using your preferred interpretation from above).

$C \rightarrow (J \wedge H)$

I see yours as

1) $(C \rightarrow J) \wedge (J \rightarrow H)$

2) $(C \rightarrow J) \wedge (C \rightarrow H)$

This is what I meant, however!

2. (2pts) My slogan for the semester is "Education is not the filling of a pail, but the lighting of a fire." Let's talk about fire (and smoke):

a. Write the expression "where there's smoke there's fire" as an implication, using statement letters S and F .

$$S \rightarrow F$$



b. Is this the same as "Fire is a necessary condition for smoke?"

Yes

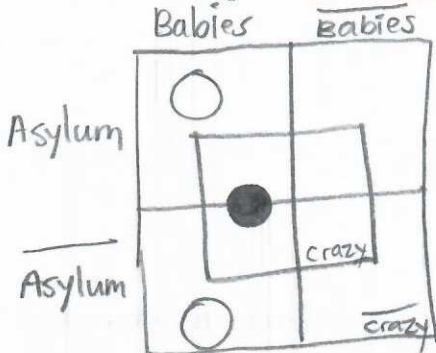


3. (2pts) You know that my favorite syllogism of Lewis Carroll is about babies:

a. Babies are crazy;

b. Crazy people should be in an asylum.

Set up Carroll's game board, and indicate the position of the grey and red counters for the first premise: "Babies are crazy".



"Babies are crazy"
(all)

Nice
work