MAT385 Quiz 01, Spring 2023

Name:

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?

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

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.

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

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".