Problem 4. (14 points). Given the following function

$$\mathbf{Z(A,B,C) = \sum m(0,1,7) + \sum d(3,5)}$$

(a) (4 points) Use the Quine-McCluskey method to find all prime implants.

(b) (4 points) Use a prime implicant chart to get the minimum sum of products.

(c) (6 points) Use a 8:1 multiplexer to realize the above Boolean function **Z(A,B,C)**.