

**MEMC-5173**

Intelligent Tools for Engineering Applications

**Assignment #2**

Due time: 5:30PM, Wednesday, Feb. 7

Q1

Question 2.28 from Book 1

Q2

Question 2.20 from Book 1. Redo Example 2.16 using other types of implications, and make necessary analysis.

Q3

For Example 3.4 from Book 2 on page 52, determine  $\mathfrak{R}_1 \circ \mathfrak{R}_2$  in the degrees of relevance between  $(1, a)$ ,  $(1, b)$ ,  $(3, a)$ ,  $(3, b)$ , by max-min and max-product compositions, respectively.

Q4

Question 3.6 from Book 2: Plot the MFs over  $[0,100]$ .

Q5

Question 3.10 from Book 2: Use a truth table to verify Equation (3.19).