

Q7. the mass value for each is given therefore.

$$m_1 \{F\} = 0.3$$

$$m_1 \{M\} = 0.15$$

$$m_1 \{A\} = 0.03$$

$$m_1 \{Animal\} = 0.42$$

$$m_1 \{Unknown\} = 0.10$$

$$m_2 \{F\} = 0.40$$

$$m_2 \{M\} = 0.10$$

$$m_2 \{A\} = 0.02$$

$$m_2 \{Animal\} = 0.45$$

$$m_2 \{Unknown\} = 0.03$$

		Sensor 2					
			F	M	A	Animal	Unknown
			0.40	0.10	0.02	0.045	0.03
Sensor 1	F	0.3	0.12	0	0	0	0.009
	M	0.15	0	0.015	0	0	0.0045
	A	0.03	0	0	0.006	0	0.0009
	Animal	0.42	0	0	0	0.189	0.0126
	Unknown	0.10	0.04	0.01	0.002	0.045	0.003

The conflict factor can be calculated as shown below.

$$K = (0.3 \times 0.10) + (0.3 \times 0.02) + (0.3 \times 0.45) + (0.15 \times 0.4) + (0.15 \times 0.02) + (0.15 \times 0.45) + (0.03 \times 0.4) + (0.03 \times 0.10) + (0.03 \times 0.45) + (0.42 \times 0.4) + (0.42 \times 0.10) + (0.42 \times 0.02)$$

$$K = 0.5484$$