1. For the function Bel: 2^X $\rightarrow$[0,1] find the basic probability assignment m: 2^X $\rightarrow$ [0,1] and the plausibility function Pl:2^X $\rightarrow$ [0,1] where X={0,1,2,3} and Bel({0}) = Bel({1})=0, Bel({2}) = Bel({3}) = Bel({0,2}) = Bel({0,3}) = Bel({1,2}) = Bel({1,3}) = ¼, Bel({0,1}) = Bel({2,3}) = Bel({0,2,3}) = Bel({1,2,3}) = ½, Bel({0,1,2}) = Bel({0,1,3}) = ¾.

2. For the function Bel: 2^X $\rightarrow$[0,1] find the basic probability assignment m: 2^X $\rightarrow$ [0,1] and the plausibility function Pl:2^X $\rightarrow$ [0,1] where X={1,2,3} and Bel({1}) = Bel({2})=0, Bel({3}) = Bel({1,3}) = 1/2, Bel({1,2}) = 1/4, Bel({2,3}) = ¾.

3. X={x1,x2,x3,x4,x5}, and two basic probability assignments, m and n are given below:

	{x4,x5}	{x1,x3}	{x1,x2}	{x2,x4}	{x1,x2,x3}
m	3/8	3/8	1/4	0	0
n	0	0	1/4	1/4	1/2

Assuming independence of both pieces of evidence, find their orthogonal sum m$\oplus$n.

4. X={a,b,c}, and two basic probability assignments, m and n are given below:

	{a}	{b}	{c}	{a,b}	{a,c}	{b,c}	{a,b,c}
m	0.3	0	0.2	0.3	0	0.1	0.1
n	0	0	0.2	0.2	0.3	0.2	0.1

Assuming independence of both pieces of evidence, find their orthogonal sum m$\oplus$n.

5. Assume that S=(X,A,V) is an information system given below:

	A	B
x1	1	2
x2	1	1
x3		1
x4	2	
x5		2

Propose two different interpretations of attributes A, B by belief functions and by plausibility function.