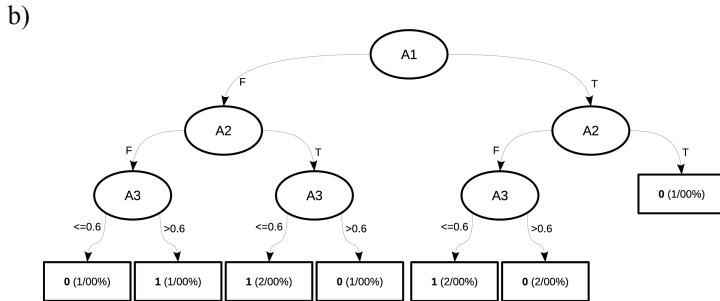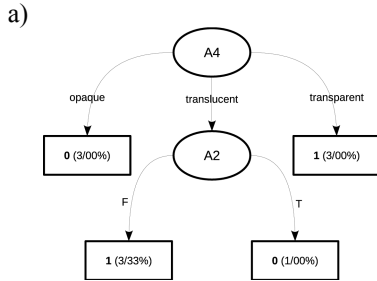**1.**

a)

Number of examples	= 10
Number of instances	= 10
Number of attributes	= 4 (excluding instance ID and class)
Number of classes	= 2

b)

	Nominal	Ordinal	Interval
A1	X		
A2	X		
A3		x	X
A4	x	X	
Class	X	x	

2.

a)

b)

3.

$$f = A_4 - A_2 - 0.5$$

4.

From 2. b)

```
if A1=T and A2=T then Class=0                  00%
if A1=T and A2=F and A3<=0.6 then Class=1       00%
if A1=T and A2=F and A3> 0.6 then Class=0       00%
if A1=F and A2=T and A3<=0.6 then Class=1       00%
if A1=F and A2=T and A3> 0.6 then Class=0       00%
if A1=F and A2=F and A3<=0.6 then Class=0       00%
if A1=F and A2=F and A3> 0.6 then Class=1       00%
```
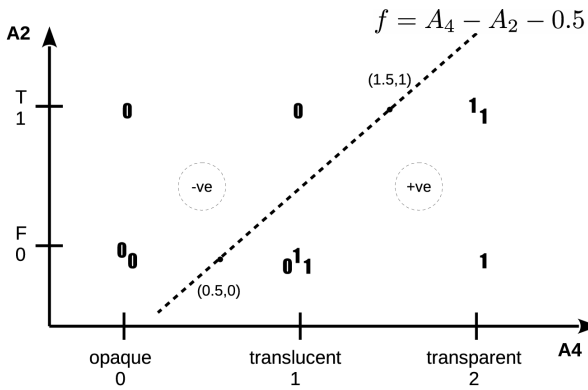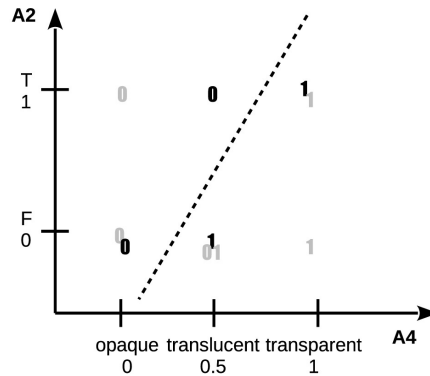
5.

a)

A2 and A4

b)

A2: F = 0, T = 1
A4: opaque = 0.0, translucent = 0.5, transparent = 1.0

c)

```
2,F,F,0.4,opaque    ,0
3,F,T,0.9,translucent,0
7,F,F,0.8,translucent,1
8,F,T,0.4,transparent,1
```