1 Given the following joint prob function, find:
P(0<Y<0.5| X=0.25)

$$f(x,y) = \begin{cases} 2-x-y & 0<x<1,\ 0<y<1 \\ \\ 0 & \textit{elsewhere} \end{cases}$$

2 Given the following joint prob function, find:
P(0 < Y < 0.5, 0 < X < 0.5)

$$f(x,y) = \begin{cases} 2-x-y & 0<x<1,\ 0<y<1 \\ \\ 0 & \textit{elsewhere} \end{cases}$$

3 Given the following joint prob function, find:
P(0 < X < 0.5)

$$f(x,y) = \begin{cases} 2-x-y & 0<x<1,\ 0<y<1 \\ \\ 0 & \textit{elsewhere} \end{cases}$$

4 Consider the joint probability distribution below"

f(x,y)	x	0	1
	1	0.05	0.13
y	2	0.25	0.30
	4	0.10	0.17

a) List g(x) for all values of x:

x	0	1

b) List h(y) for all values of y:

y	1	2	4

c) Show whether or not x and y are independent

d) What is the probability that y = 2 given that x = 1 ?

e) What is the probability that y = 2 and x = 1 ?

f) What is the probability that y = 2 or x = 1 ?

g) What is the probability that y > 1 ?

d) What is the probability that y = 2 given that x = 1 ?

e) What is the probability that y = 2 and x = 1 ?

f) What is the probability that y = 2 or x = 1 ?

g) What is the probability that y > 1 ?