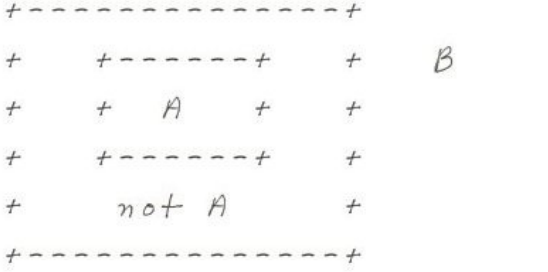
Problem 1

P(A intersection B)=Ø.75
P(B)=1.Ø
What is P(not A)?

Venn diagram



Since A intersection B=A
P(A)=Ø.75.
P(not A)=Ø.25
because 1=P(B)=
P(A union not A)=
P(A)+P(not A)

Problem 2

Say the probability a person owns a laptop computer is Ø.9. What is the probability 2 people selected from 12 don't own a laptop?

$_{12}C_2(0.1)^2(0.9)^{10}=66(0.01)(0.348)=0.230$

This answer can also be found using a binomial distribution table with n=12, x=2 and p=Ø.1.

Problem 2 can also be solved via Minitab

Probability Density Function

Binomial with n = 12 and p = 0.1

x	P(X = x)
2	0.230128

http://primepuzzle.com/tunxis/statistics/ap.html - tct - 7/23/2010