1) Silcia Tea sell Hercules p150 Desktop for $2400(includes GST). The owner has kept a record of the number of computers, *n,* sold per week and the results are shown in this probability distribution.

N	1	2	3	4
P(N = n)	0.1	0.2	0.4	0.5

a) Calculate the expected sales each week.
b) Calculate the variance of the sales each week.

The fixed costs of the business (salaries rent, power and so on) are $900 per week and the profit per computer is $375.

c) Calculate the expected profit each week.
d) Find the variance in profit each week.
e) Find the standard deviation in profit each week.

2) Raisins are packaged into cardboard containers. The weight of raisins delivered into a container has a distribution with mean 200g and a standard deviation of 6g. The weight of an empty container has a distribution with mean 15g and a standard deviation of 0.5g. Assume the weight of the empty container and the weight of the raisins are independent.

a) Calculate the expected weight of a filled container of raisins.
b) Calculate the variance of a filled container of raisins.
c) Calculate the standard deviation of a filled container of raisins.