1 – 100 // 5, 10
100 – 1000 // 50 100

5+1

36 Farmers of Mwero Zone A formed an association and in the recent harvest they got the following weights of produce (in kg).

L = 150
H = 400

240	250	360	400	240	340	160	250	150
320	210	330	350	380	310	200	230	290
270	290	390	300	170	240	340	310	180
250	280	290	280	250	360	150	280	240

All farmers agreed to bring together all their produce so that they can share equally in order to support those who got low produce to remain in the production. It is assumed that every farmer will receive 270kg on average after sharing equally.

The ministry of agriculture, animals and fisheries would like to identify not more than ten farmers whom they can support with some farm inputs from those whose weights didn't exceed 210.5kg using their more sensitive automatized weighing scale.

The fertilizer factory in Tororo is going to facilitate farmers who got above 310kg of produce to go and visit their factory so as to educate them about effective use of artificial fertilizers.

10/36
0.277
27.777
27.8%

Task:

a) Use your expertise and organize the above information so that it is well understood and suggest whether the assumption was right.

b) With the help of a statistical illustration, determine whether the support was to be given or not and if it was given how many got?

7 Farmers

c) What is the chance that a member of the association is going to visit the fertilizer factory in Tororo?

149.5 – 270

A freq dis table showing the Mean

Weight (kg)	Tally	frequency (F)	mid value (x)	d = x – A	Fd	Cumulative Freq.	Class boun
150 – 199	𝍸	5	174.5	-95.5	-477.5	5	149.5 – 199.5
200 – 249	𝍸 II	7	224.5	-45.5	-318.5	12	199.5 – 249.5
250 – 299	𝍸 𝍸 I	11	274.5	4.5	49.5	23	249.5 – 299.5
300 – 349	𝍸 II	7	324.5	54.5	381.5	30	299.5 – 349.5
350 – 399	𝍸	5	374.5	104.5	522.5	35	349.5 – 399.5
400 – 449	I	1	424.5	154.5	154.5	36	399.5 – 449.5
		Ef = 36			Efd = 312		

A = Assumed mean (270)

Mean = A + Efd/Ef
= 270 + 312/36
= 270 + 8.667
= 278.671kg
≈ 279kg