Data and Probability

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Item 3 & 4

- Data collection/display and presentation
- Graphs
- Set theory
- Matrices
- Probability

Focal Areas

- Frequency Table
- Graph
- Measures of central Tendencies
- Conclusion

Maximizing the scores

Frequeny Table	Central Tendencies	Graph	Conclusion
1. Well defined variables 2. Coherence 3. Relevant Variables 4. Closed rectangle 5. Avoid short forms 6. Be neat 7. Allocate sufficient time for each step without rushing. 8. Class 9. Avoid having very many and very few class limits.	1. Mean/Average/Assumed Mean 2. Median 3. Mode 4. Formulas 5. Units were applicable	1. Title 2. Axes well labeled 3. Demarcation 4. Labels with units were applicable 5. Smooth curve-Free hand for O give 6. Estimation areas cleared shown 7. Triangles 8. Proper Triangles for the mode	1. Do not round off to zero d.p .- Reason 2. Units are important 3. Back your conclusion with figures 4. Write a full meaningful statement

DO’s and DON’T’s

- Draw your frequency distribution table. Be coherent

- Include things only important on the table
- Always draw your graphs on the squared paper.

Graphs

- Cumulative frequency curve/O give- Estimation
- Histogram: Displays distribution of continuous data.

Calculation of Central Tendencies

1. Based on your calculations, determine which age group was most represented among those who improved their health.

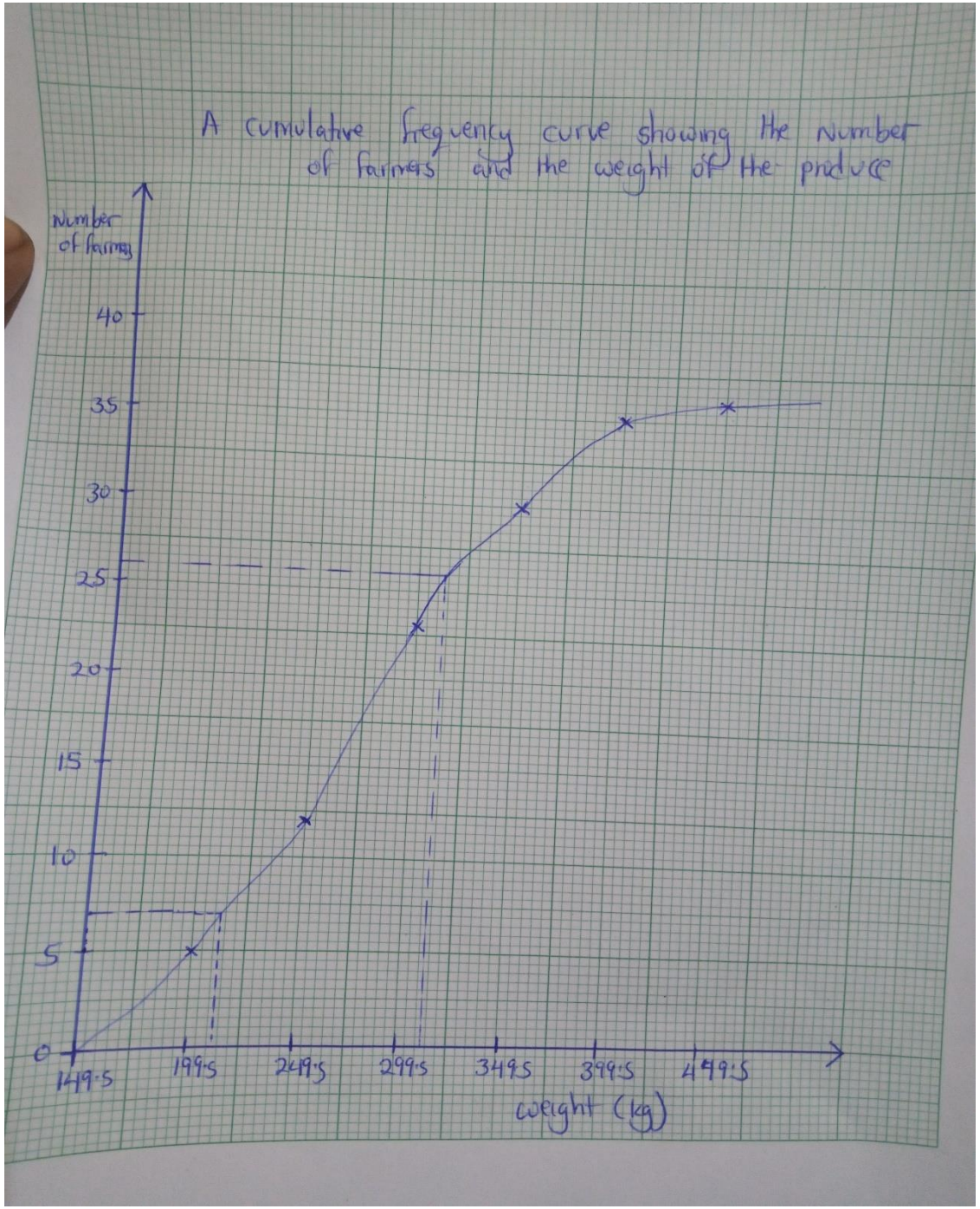
2. Giving a reason, based on calculations using the data collected, suggest the time the assembly should always start.

3. Based on your calculations, determine the average weight of the farmers produce.

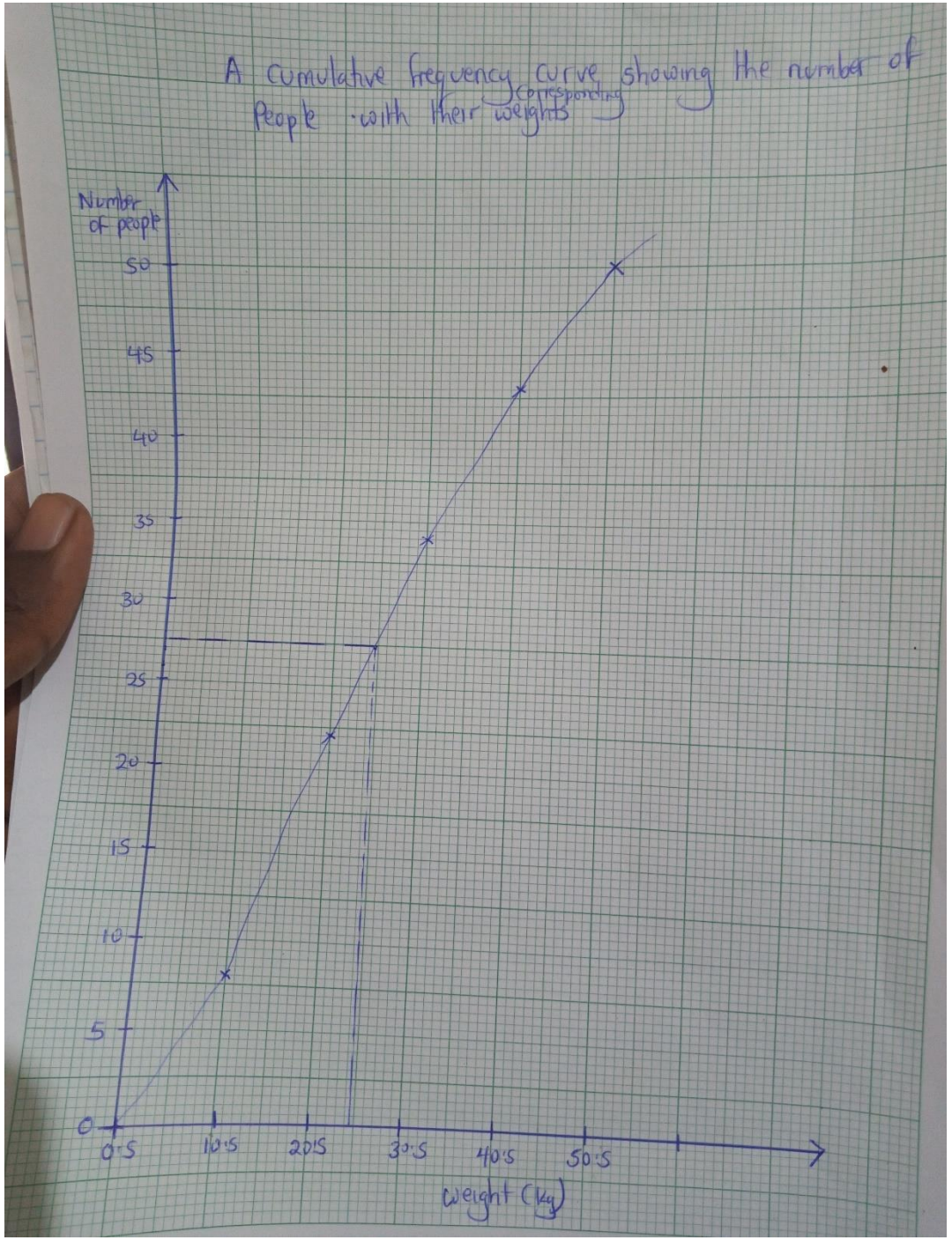
Decision on the Statistical graphs

1. The teacher wishes to know the number of students who scored above 80 . Help him/her to estimate this number of students.
2. The deputy Head teacher advised the teachers to always start the morning lesson when at least 60% of the students are present. Based on the advise, determine the time the lesson should start.
3. The hospital management wants to stock the medicine basing on the age group that visited the hospital often times. Advise them on how many children they should plan for before stocking the medicine.

A cumulative frequency curve showing the Number of farmers and the weight of the produce



A cumulative frequency curve showing the number of people with their corresponding weights



How to generate the Starting class

- Choose a class width that will give you at least 5 class limits.
- 15, 18, 20, 22, 17, 25, 23, 28, 26, 21 30, 33, 35, 32, 36, 39, 42, 37, 41, 28 45, 48, 29, 31, 26, 27, 30, 33, 34, 31 28, 35, 40, 42, 37, 39, 36, 38, 29, 43 46, 47, 30, 32, 31, 45, 27, 44, 46, 49 52, 53, 55, 51, 50, 56, 57, 58, 59, 51

Sample Item

During a health initiative in your town last year, the following ages represent the participants whose health needs attention:

Task:

(a) Help the health coordinator organize the ages of the participants to aid interpretation.

(b) Construct a representation of the data to show the age distribution of the participants who need urgent attention .

(c) (i) Based on your calculations, determine which age group was most represented.

(ii) Provide recommendations to the health coordinator based on your data analysis.