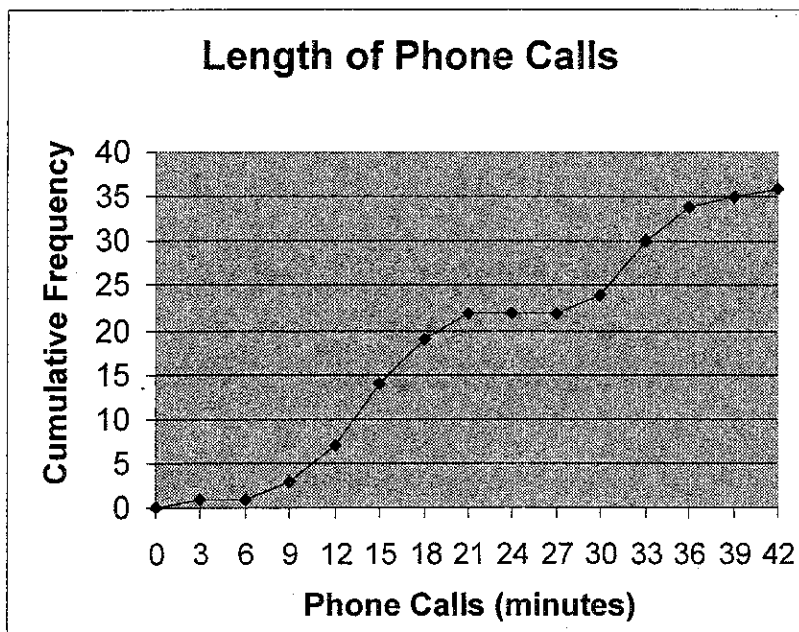


## Special Problem 1A

## Gabalot High Phone Calls

The graph below displays the cumulative frequency of the lengths of phone calls made from the mathematics department office at Gabalot High.



- How many phone calls were made from the Gabalot High math office this month?
- Use the graph to estimate the  $Q_1$ , median and  $Q_3$  length of a phone call.
- What percentage of phone calls lasted more than 30 minutes?
- Construct a boxplot that represents the length of phone calls data.
- Based on the graph above, make a frequency table for the length of phone calls data. Make the first interval  $0 \leq m(\text{minutes}) < 3$ .
- Estimate the value of the mean.
- Describe all the features of the distribution of lengths of phone calls made from the math department offices.
- Which plot would you have to adjust to create an ogive? What change would you have to make?