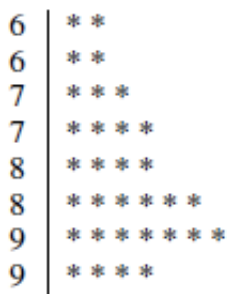




## “FRAPPY” {Free Response AP Problem...Yay!}

The following problem is taken from an actual Advanced Placement Statistics Examination. Your task is to generate a complete, concise statistical response in 15 minutes. You will be graded based on the AP rubric and will earn a score of 0-4. After grading, keep this problem in your binder for your AP Exam preparation.

The graph below displays the scores of 32 students on a recent exam. Scores on this exam ranged from 64 to 95 points.



### Scoring:

(a) Describe the shape of this distribution.

**E P I**

(b) In order to motivate her students, the instructor of the class wants to report that, overall, the class’s performance on the exam was high. Which summary statistic, the mean or the median, should the instructor use to report that overall exam performance was high? Explain.

**E P I**

(c) The midrange is defined as  $\frac{\text{maximum} + \text{minimum}}{2}$ . Compute this value using

the data above. Is the midrange considered a measure of center or a measure of spread? Explain.

**E P I**

**Total: \_\_/4**