



## “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 Better Business Council of a large city has concluded that students in the city’s schools are not learning enough about economics to function in the modern world. These findings were based on test results from a random sample of 20 twelfth-grade students who completed a 46-question multiple-choice test on basic economic concepts. The data set below shows the number of questions that each of the 20 students in the sample answered correctly.

12	16	18	17	18	33	41	44	38	35
19	36	19	13	43	8	16	14	10	9

### Scoring:

(a) Display these data in a stemplot.

**E I**

(b) Use your stemplot from part (a) to describe the main features of this score distribution.

**E P I**

**E P I**

(c) Why would it be misleading to report only a measure of center for this score distribution?

**E P I**

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