

EPRS854  
More Exercise

In each of the examples below select a statistical procedure that would best analyze the data. Use the key below and write the answer in the blank.

- a. Independent t-test
- b. Dependent t-test
- c. One-way ANOVA
- d. Factorial ANOVA
- e. ANCOVA
- f. single group repeated measures
- g. others (Chi-square test)

\_\_\_ 1. A program was prepared to accelerate the development of moral thinking in high school students. Students were first categorized into groups based on Kohlberg's scheme of stages of moral reasoning. Then, from within each stage students were randomly assigned to the program or a control group.

\_\_\_ 2. The study investigated a personalized system of instruction (PSI) for teaching calculus. From 1800 calculus I students 500 volunteered to take PSI courses. The remaining 1300 took traditional calculus. All students were tested before the course on general math aptitude. All students took a common final exam at the end of the course.

\_\_\_ 3. In a learning experiment, half of the people who run the subjects through the treatment are women and half are men. The results show an interaction between the sex of the experimenter and the independent variable.

\_\_\_ 4. Do students' anxiety level change over time in a basic statistics course? The anxiety level was measured four times during the semester.

\_\_\_ 5. A researcher is interested in what percentage of parents of behavioral-problem children are divorced. He compares that percentage with the that of a normal population.