

Types of Statistical Tests

Math Academy 1 Worksheet 8-D

1. State the type of statistical test that would be appropriate for the following research questions.

- a) Do more people prefer skiing or snowboarding?
- b) Do people commute more the higher their salary is?
- c) Are gas prices cheaper in rural areas or in urban areas?
- d) Can adults go longer than children without blinking their eyes?
- e) Do high school graduates earn more than high school dropouts?
- f) Are women more likely than men to prefer skiing over snowboarding?
- g) Are heartrates different when people wake up than when they go to bed?
- h) Do different grocery stores have different average wait times at checkout?
- i) Is there a relationship between season of birth and field of study in college?
- j) Is the number of addition problems people can do in a minute more variable if people are watching?

2. Make up an alternate hypothesis for each of the following types of test.

- a) ANOVA
- b) F test of two variances
- c) χ^2 test of independence