Review Exercise

For each of the claims that follow, choose which of the following tests would be most appropriate.

(a) One sample t test
(b) Two sample t test
(c) Matched pair test
(d) One sample proportion test
(e) Two sample proportion test
(f) Regression slope test
(g) Chi-square goodness-of-fit test
(h) Analysis of variance

1. More than half of all babies born are boys.
2. The probability a student will pass Math 3 (pre-calculus) is the same as the probability a student will pass AMS 3 (also pre-calculus).
3. A person’s blood pressure is higher when taking an exam compared to reading a novel.
4. Smokers have a shorter life expectancy than non-smokers.
5. Increased spending on schools corresponds to better student performance.
6. Gas prices in Santa Cruz are the same as in San Jose.
7. The average GPA is the same for students in each of the ten colleges.
8. A coin is fair.
9. The average rent for a one-bedroom apartment in Santa Cruz is $1000.
10. Coho salmon caught off the coast of Santa Cruz are equally likely to have been hatched in any of the four nearby rivers.