

## STATISTICS 101 - Homework 4

### Not to be turned in

- Problems similar to these will appear on the second midterm exam scheduled for Tuesday, June 14th
- You will have an opportunity to get help on homework during lab.

**Reading:** June 6 - June 10 Chapters 12, 13 and 14

### Problems:

1. Read pages 222 through 238 and beginning on page 238, do exercises 11, 12, 13, 18 and 20
2. Read pages 241 through 257 and beginning on page 257, do exercises 32, 34, 36.
3. The following is excerpted verbatim from a package of COLD-EEZE<sup>®</sup>.

### CLINICALLY PROVEN COLD-EEZE<sup>®</sup> WITH ZIGG<sup>TM</sup>

The following studies apply **only to Cold-Eeze<sup>®</sup> with Zigg<sup>TM</sup> (Zinc Gluconate Glycine)**, the **only** great tasting lozenge proven effective in treating a Common Cold.

A randomized, double-blind placebo study, with **23mg of ionic zinc** in a citrus flavored lozenge, concluded that treatment of a cold with our Patented formula within 48 hours of the onset resulted in symptom relief and a **42% reduction** in the duration of the common cold.

- (a) What is a “randomized, double-blind placebo study”?
- (b) What important piece of information is missing from the description of the study?
- (c) Make a diagram to show how this study was designed.
- (d) What does the phrase “resulted in a 42% reduction in the duration of common cold symptoms.” mean?
- (e) Zinc lozenges have a unique and strong taste. What problem could this cause in this “randomized, double-blind placebo study”?