

# EPPS 6313 : Recitation Session #5

Oct. 10. 2012

## Questions?

- You learned :
- Hypothesis Test For Difference between Two means
  
- Two Sample Proportion Test
  
- Anything else?

## Problem 1

Ten cigarettes of brand A had an average nicotine content of 3.1mg with standard deviation of 0.5mg, while eight cigarettes of brand B had an average nicotine content of 2.7mg with standard deviation of 0.7mg.

Test the difference (Assumption : two sets of data is independent)

## Problem 2

A researcher believes that children in a certain school have dangerous levels of lead in their blood. Assume the unsafe level is 60.0 parts per million (ppm). Blood tests are performed on a random sample of 229 kids from the school, finding a sample mean of 61.8 and a sample standard deviation of 15.

Test the hypothesis that the mean level in the school is above the unsafe level at  $\alpha = 0.05$ .

### Problem 3

Use following data information to test whether there is a difference in the proportion of workers who belong to unions by marital status at the 0.01 level of significance.

- Married : Yes(# is 350, union proportion is 0.21), No (# is 184, union proportion is 0.13)
- Union proportion : 0.18