

HOMEWORK 1

STA 321, Basic Statistical Theory I
Spring Semester, 2015

Due: January 29th 2015 This week, the homework only consists of three problems that deal with basic terminology. The lecture notes might help in answering these questions.

1 Distinguish between *descriptive statistics* and *inferential statistics*. For each, provide an illustrative example from your field of research/interest.

2 Distinguish between *population* and *sample*, and between *parameter* and *statistic*.

(a) How exactly are these four terms defined?

(b) As an example consider the following Gallup Poll

www.gallup.com/poll/122234/Constituents-Divided-Highly-Partisan-Healthcare-Reform.aspx Here, adult Americans were asked whether they would advise their member of Congress to vote for or against a healthcare reform bill. Additionally, respondents were asked about their party affiliation. Referring to this Aug 6-9 poll, what are population, sample, parameter, and statistic?

3 Do exercises 7.1.1, 7.1.2, 7.1.3, 7.1.4.