

4.1 HW #'s 1, 3, 5, 7, 9, 11,

11) Population: all local businesses
Sample: the 73 businesses that returned the survey

13) Population: the 1,000 envelopes stuffed each hour
Sample: the 40 selected envelopes

15) This is a voluntary survey and only people with strong opinions on the subject (strong enough that they are willing to spend time and money) will respond to this advertisement.

17) This is a voluntary response sample. It is biased in favor of those who feel most strongly about the issue being surveyed.

19) a) This is a convenience sample

b) It is unlikely that the first 100 students to arrive at school are representative of the student population in general.

The reported average of 7.2 hrs of sleep is probably higher since you might expect that the students who arrive first are those who got a good night's sleep the night before. - Students that received less sleep the night before are probably more likely to run late the next morning.

11 (a) Number the 40 students from 01 to 40 (use 2 digits!) alphabetically by last name.

* Go to the random number table (TABLE D).

* Pick A STARTING POINT SAY LINE 121 and record 2 digit numbers UNTIL you HAVE 5 UNIQUE NUMBERS BETWEEN 01 and 40. see below

~~11~~, ~~48~~, ~~30~~, ~~99~~, ~~84~~, (29), (07), ~~11~~, ~~48~~, ~~63~~, ~~11~~, ~~34~~
~~10~~, ~~54~~, ~~22~~, (23), ~~45~~, (10)

Select Names corresponding to 29, 07, 34, 22 & 10.

(b) Now use Line 107 to select sample of the 40 Names given

107: 82, 73, 95, 78, 90, (20), 80, 74, 75, (11), 81, 67, 65, 53,
00, 94, (38), (31), 48, 93

108: 60, 94, (07)

Sample:
20 - JOHNSON
11 - DRABIN
38 - WASH BURN
31 - RIDER
07 - ALLOWAY