STATISTICAL LITERACY -CHAPTER 4

Review of statistical analysis tools

1) Ratios

In the student body the ratio of boys to girls in the school is 2:3

a) If there are 623 girls in the school, how many boys are there?

$$\frac{Boys}{Girls} = \frac{2}{3} = \frac{x}{623}$$

$$2 \times 623 = 3x$$

$$\frac{2 \times 623}{3} = x$$

$$415 \doteq x$$

Therefore, there are about 415 boys in the school when there are 623 girls.

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b) What is the ratio of boys to students?

$$\frac{2}{5}$$

c) What percent of the student body is boys? Girls?

$$\frac{2}{5}\times 100$$

$$= 2 \div 5 \times 100$$

$$= 40\%$$

Girls?

=100-40=60%

Therefore 40% of the student body are boys

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2) MEASURES OF CENTRAL TENDANCY

MEAN : This is the measure usually referred to as the "average" of the data. It is found by adding up all the data and dividing it by the number of pieces of data you have.

Example: Data: 4,7,3,4,1,6,9,3,4,6,5,2,6

Mean: (4+7+3+4+1+6+9+3+4+6+5+2+6) ÷ 13 = about 4.6

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MEDIAN: This measure is found by pung the data in numerical order and finding the middle number. If there are two middle numbers, add them together and divide by two.

Example: Data: 4,2,3,4,1,5,3,4,2,6
Median: Rearrange data: 1,2,2,3,3,4,4,4,5,6
Middle numbers are the 5th and 6th pieces which would be (3+4) ÷ 2 = 3.5

MODE: This measure is the piece of data that shows up the most often.

Example: Data: 7,3,2,5,4,3
Mode: 3 (shows up 2 times)

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Range: The highest piece of data subtract the lowest piece of data

Example: Data: 4,6,5,2,4,8
Range: 8-2 = 6

Homework:
p. 192 #1-3
p. 193 #1,2
p. 194 #1,2
Read p. 195

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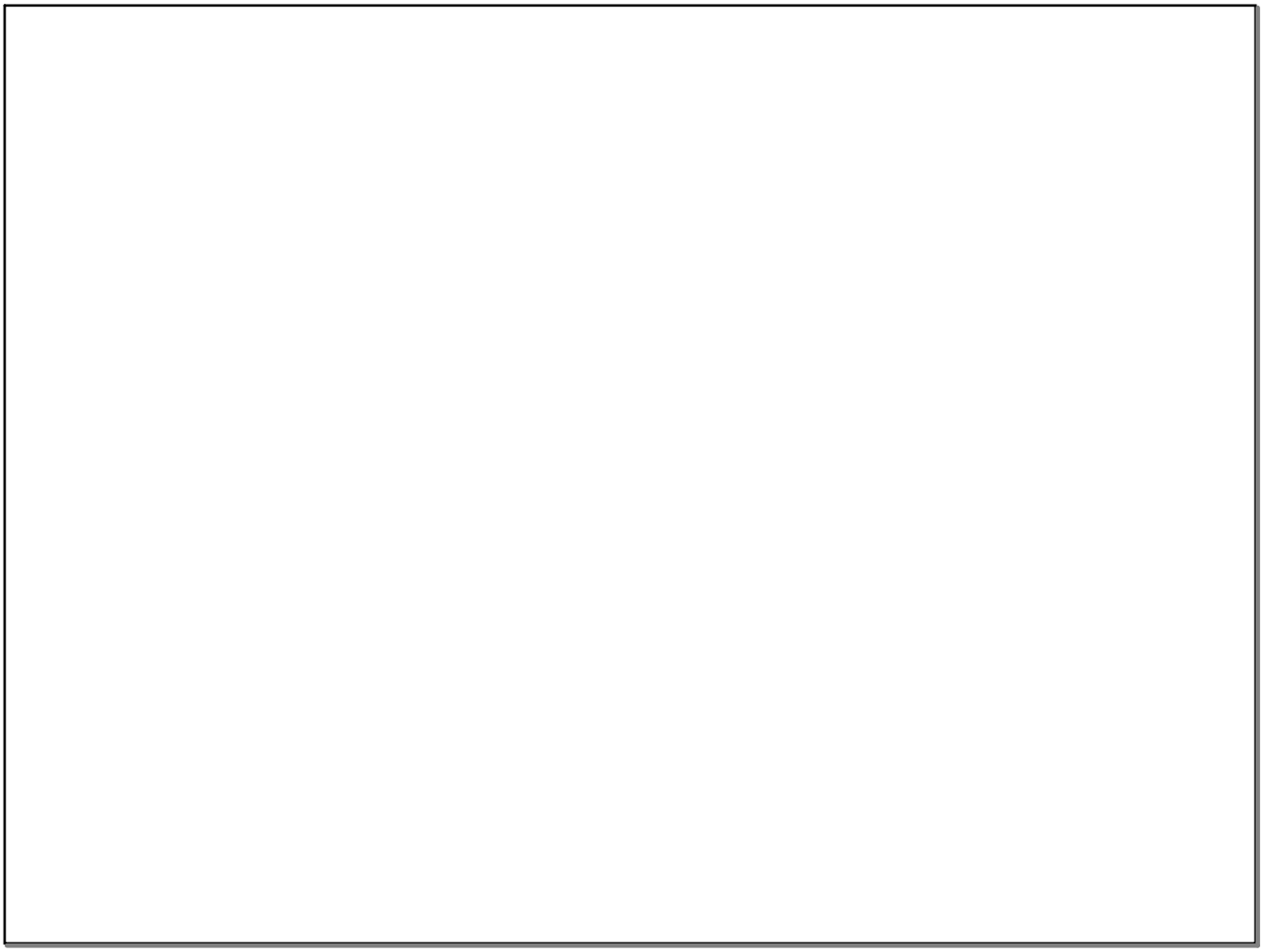

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