

Mth 23, Homework 4 on Section 3.3

Due by Wed, Sept 30.

Please use lots of space, so I can include comments or corrections. Explain your answers, showing clearly any work you had to do. Each question is worth 3 points.

Section 3.3 Percentiles and Box-and-Whisker Plots

- (1) Your friend's daughter is at the 70th percentile for height at that age. In your own words explain precisely what that means.
- (2) Clerical staff at a hospital were surveyed to find how many months they had been in their current position. The results were

31 42 6 25 22 3 29 32 15 72

Give the five number summary of this data: that is the lowest number, the quartiles Q_1 , Q_2 , Q_3 , and the highest number.

- (3) Use your results from Question 2 to:
- (a) Draw a box-and-whisker plot.
(Draw it horizontally and evenly mark off the numbers 0, 10, 20, ..., 70, 80.)
 - (b) Find the interquartile range.
 - (c) Do you notice anything about this data set from your work?

If you're stuck on a question:

- Ask me about it after class.
- Come to my office hours: Mon 12:00 - 1:00, Wed 12:00 - 1:00 in CP 317.
- Go to the Math Tutorial Lab in-person in CP 303 or online.