Lesson #6

Aim: What are percentiles?

Do Now:

1. You have 15 min to work on your HW
2. page 161: 1, 3 (sect 3.4) → Brown Book

1. Angela took a general aptitude test and scored in the 82nd percentile for aptitude in accounting. What percentage of the scores were at or below her score? What percentage were above?

Position

a portion of 100 (%)

82% of students are at 82% or below

note: she did 82% better than other students

82nd percentile

18% of students did better than her

3. The town of Butler, Nebraska, decided to give a teacher competency exam and defined the passing scores to be those in the 70th percentile or higher. The raw test scores ranged from 0 to 100. Was a raw score of 82 necessarily a passing score? Explain.

↳ not your grade only the points earned.

NO, IF All students did above 82 points OR a lot more 82 RAW SCORE can be below 70 percentile.

Mar 8-2:07 PM

7. The following data are percentage increases in annual salary for faculty at the professor rank at Oregon colleges and universities. Source: *Academe: Bulletin of the American Association of University Professors*, March/April, 1993.

5.8	6.4	6.4	10.2	6.0	6.2	6.0	6.1
6.1	1.3	7.2	6.7	10.1	6.4	4.0	

(a) Rank the data. (ARRANGED DATA FROM LOWEST TO HIGHEST VALUE)
(b) Compute the five-number summary and the interquartile range.
(c) Make a box-and-whisker plot.

(b) Min, Q_1, Q_2, Q_3, MAX
25% 50% 75%

interQuartiles $Q_3 - Q_1$

(c) USE the Five-number summary to create the graph.