Chapter 2 Notes AP Stats

Below is the roster for the Chicago Cubs in a particular year.

Player	Pos	Status	Ht	Wt	Age
Koyie Hill	Catcher	Active	6'0'	190	30
Geovany Soto	Catcher	Active	6'1'	225	26
Derrek Lee	First Baseman	Active	6'5'	245	33
Jeff Baker	Second Baseman	Active	6'2'	210	28
Aaron Miles	Second Baseman	Active	5'8'	180	32
Andres Blanco	Second Baseman	D.L.	5'10'	190	25
Mike Fontenot	Second Baseman	Active	5'8'	170	29
Ryan Theriot	Shortstop	Active	5'11'	175	29
Jake Fox	Third Baseman	Active	6'0'	210	27
Aramis Ramirez	Third Baseman	Active	6'1'	215	31
Alfonso Soriano	Outfielder	Out	6'1'	180	33
Milton Bradley	Outfielder	Active	6'0'	225	31
Reed Johnson	Outfielder	D.L.	5'10'	180	32
Sam Fuld	Outfielder	Active	5'10'	185	27
Kosuke Fukudome	Outfielder	Active	6'0'	187	32
Randy Wells	Starting Pitcher	Active	6'3'	230	26
Rich Harden	Starting Pitcher	Active	6'1'	195	27
Carlos Zambrano	Starting Pitcher	D.L.	6'5'	255	28
Ryan Dempster	Starting Pitcher	Active	6'2'	215	32
Ted Lilly	Starting Pitcher	Active	6'1'	190	33
Chad Fox	Relief Pitcher	D.L.	6'3'	215	38
Kevin Gregg	Relief Pitcher	Active	6'6'	238	31
Aaron Heilman	Relief Pitcher	Active	6'5'	227	30
John Grabow	Relief Pitcher	Active	6'2'	205	30
Angel Guzman	Relief Pitcher	Active	6'3'	200	27
David Patton	Relief Pitcher	D.L.	6'3'	205	25
Esmailin Caridad	Relief Pitcher	Active	5'10'	193	25
Tom Gorzelanny	Relief Pitcher	Active	6'2'	202	27
Sean Marshall	Relief Pitcher	Active	6'7'	220	26
Carlos Marmol	Relief Pitcher	Active	6'2'	180	26

a. Make a histogram of the heights of the players. Describe the histogram. Be sure to include a description of the shape, center, spread, gaps and outliers if there are any.
b. Find the standard deviation and mean of their heights.
c. Determine the percentile and z score for Angel Guzman and Aaron Heilman.
d. Assume the heights of men are normally distributed with a mean of 69.3 inches and a standard deviation of 2.8 inches. On this scale how do Angel Guzman and Aaron Heilman compare?

Density Curves:

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A density curve describes the overall patterns of a distribution. The area under the curve and above the any interval of values on the horizontal axis is the proportion of all observations that fall in that interval.

Mean and Median of Density Curves:

Symmetric Left Skew Right Skew

Median of density curve…

Notation:

Mean of density curve…

Notation:

Assignment: p.128-129 2.9, 2.10,2.12, 2.13