Denver Nuggets Roster 2016-2017

Player Name and Number	Weight	Height
Darrell Arthur 00	235	6'9
Will Barton 5	175	6'6
Malik Beasley 25	196	6'5
Wilson Chandler 21	225	6'8
Kenneth Faired 35	228	6'8
Danilo Gallinari 8	225	6'10
Gary Harris 14	210	6'4
Juan Hernangomez 41	230	6'9
Roy Hibbert 34	270	7'2
Nikola Jokic 15	250	6'10
Mike Miller 3	218	6'8
Emmanuel Mudiay 0	200	6'5
Jamal Murray 27	207	6'4
Jameer Nelson 1	190	6'0
Mason Plumlee 24	255	6'11

1. Find the 5 number summary for the height of the players. Construct a box plot.

Minimum: _____

Lower Quartile: _____

Median: _____

Upper Quartile: _____

Maximum: _____

3. Give the 25th percentile for the Nuggets height. Explain what the percentile means in the distribution.

4. Give the 75th percentile for the Nuggets height. Explain what the percentile means in the distribution.

5. Calculate the IQR for the Nuggets heights. Explain what this means in the distribution.

6. Describe the shape of the box plot for the heights.

Adapted from illuminations lesson

2007-2008 Rockets Roster

Player Name	Height	Weight
Rafer Alston	6'2	175
Shane Battier	6'8	220
Aaron Brooks	6'0	160
Steve Francis	6'3	210
Mike Harris	6'6	240
Chuck Hayes	6'6	238
Luther Head	6'3	185
Mike James	6'2	195
Carl Landry	6'7	245
John Lucas III	5'11	165
Tracy McGrady	6'8	223
Brad Newley	6'6	195
Justin Reed	6'9	238
Luis Scola	6'9	230
Kirk Snyder	6'6	225
Bonzi Wells	6'5	210
Yao Ming	7'6	310

1. Find the 5 number summary for the heights of the players. Construct a box plot.

Minimum: _____

Lower Quartile: _____

Median: _____

Upper Quartile: _____

Maximum: _____

2. Find the 5 number summary again for the heights except for Yao Ming.

Minimum: _____

Lower Quartile: _____

Median: _____

Upper Quartile: _____

Maximum: _____

Compare the box plot from the Houston Rockets.

3. Did the min or max change? Give the values and discuss the reason why it changed or why it did not.

4. Did the median change? Give the values and discuss the reason why it changed or why it did not.

5. Did the upper or lower quartile change? Give the values and discuss the reason why it changed or why it did not.
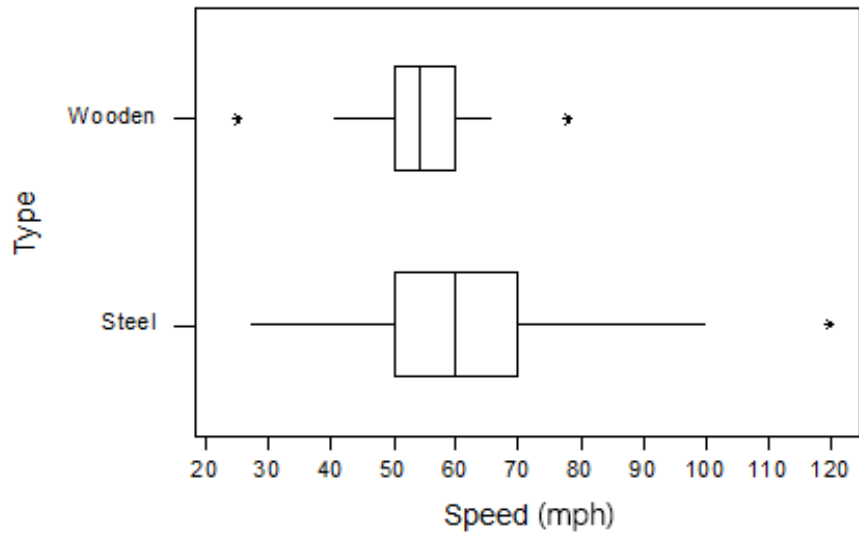
6. Find the mean with Yao Ming and without. What do you notice?

7. What would Yao Ming be considered? Why?

8. Give the 50th percentile for the Rockets height. Explain what this means in the distribution.

9. Calculate the IQR for both the Rockets height. Explain what this means in the distribution.

1. The box plots below display the distributions of maximum speed for 145 roller coasters in the United States, separated by whether they are wooden coasters or steel coasters.

Based on the box plots, answer the following questions or indicate that you do not have enough information.

a. Which type of coaster has more observations?

   A. Wooden
   B. Steel
   C. About the same
   D. Cannot be determined

   Explain your choice:

b. Which type of coaster has a higher percentage of coasters that go faster than 60 mph?

   A. Wooden
   B. Steel
   C. About the same
   D. Cannot be determined

   Explain your choice:

c. Which type of coaster has a higher percentage of coasters that go faster than 50 mph?

   A. Wooden
   B. Steel
   C. About the same
   D. Cannot be determined

   Explain your choice:

d. Which type of coaster has a higher percentage of coasters that go faster than 48 mph?

   A. Wooden
   B. Steel
   C. About the same
   D. Cannot be determined

   Explain your choice:

a) How does the median number of speeds in the steel compare to the median number of speeds in the wooden?

_____

_____

_____

b) What is the speed of steel in the 25th Percentile?_____

c) What is the speed of wooden in the 75th Percentile?_____

d) What percentage of wooden have an speed of 50 or higher?_____

e) Compare the two distributions by giving the 5 number summary for each plot.

f) Describe the shape of each plot.

Denver Nuggets Roster 2016-2017

Player Name and Number	Weight	Height
Darrell Arthur 00	235	6'9
Will Barton 5	175	6'6
Malik Beasley 25	196	6'5
Wilson Chandler 21	225	6'8
Kenneth Faired 35	228	6'8
Danilo Gallinari 8	225	6'10
Gary Harris 14	210	6'4
Juan Hernangomez 41	230	6'9
Roy Hibbert 34	270	7'2
Nikola Jokic 15	250	6'10
Mike Miller 3	218	6'8
Emmanuel Mudiay 0	200	6'5
Jamal Murray 27	207	6'4
Jameer Nelson 1	190	6'0
Mason Plumlee 24	255	6'11

2. Find the 5 number summary for the weights of the players. Construct a box plot.

Minimum: _____

Lower Quartile: _____

Median: _____

Upper Quartile: _____

Maximum: _____

3. Give the 25th percentile for the Nuggets weight. Explain what the percentile means in the distribution.

3. Give the 75th percentile for the Nuggets weight. Explain what the percentile means in the distribution.

4. Calculate the IQR for the Nuggets weights. Explain what this means in the distribution.

5. Describe the shape of the box plot for the weight.

2007-2008 Rockets Roster

Player Name	Height	Weight
Rafer Alston	6'2	175
Shane Battier	6'8	220
Aaron Brooks	6'0	160
Steve Francis	6'3	210
Mike Harris	6'6	240
Chuck Hayes	6'6	238
Luther Head	6'3	185
Mike James	6'2	195
Carl Landry	6'7	245
John Lucas III	5'11	165
Tracy McGrady	6'8	223
Brad Newley	6'6	195
Justin Reed	6'9	238
Luis Scola	6'9	230
Kirk Snyder	6'6	225
Bonzi Wells	6'5	210
Yao Ming	7'6	310

1. Find the 5 number summary for the weight of the players. Construct a box plot.

Minimum: _____

Lower Quartile: _____

Median: _____

Upper Quartile: _____

Maximum: _____

.   .

3. Give the 25th percentile for the weight. Explain what the percentile means in the distribution.

6. Give the 75th percentile for the weight. Explain what the percentile means in the distribution.

7. Calculate the IQR for the weights. Explain what this means in the distribution.

8. Describe the shape of the box plot for the weight.