

# Alg Stats 2.2a

# NBA Heights

**Just how much taller are NBA basketball players than students?**

Compare the following data for 25 professional basketball players to the data for 25 members of your math class.

- 1) Enter the data from the two lists into the calculator.
- 2) Create two box plots on the calculator, one for students, one for basketball players. Sketch below. Label appropriately.

**Your Height (centimeters)** \_\_\_\_\_

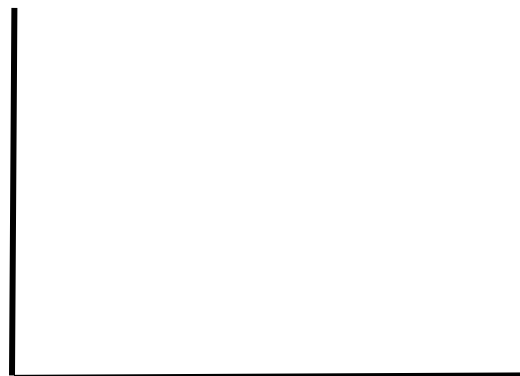
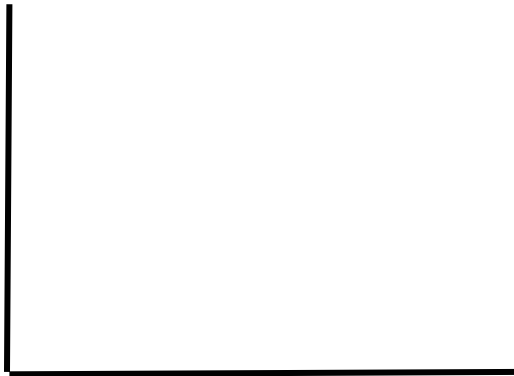
**Basketball Player Heights (centimeters)**

18	1	4	6						
19	0	2	4	6	8	9			
20	0	1	2	3	4	5	5	6	8
21	0	0	1	3	4	5			
22	1								

**Student Heights (centimeters)**

13	_____
14	_____
15	_____
16	_____
17	_____

- 3) Create two histograms using the calculator, one for students, one for basketball players. Think about the scale and frequency. Sketch below. Be certain to label appropriately.



4) How might you describe the typical height for students? Be certain to use appropriate vocabulary, (mean, median, mode, central tendency, quartiles etc.). Explain all of your thinking.

5) How might you describe the typical height for basketball players? Be certain to use appropriate vocabulary, (mean, median, mode, central tendency, quartiles etc.). Explain all of your thinking.

6) Compare the heights of students with heights of basketball players using appropriate vocabulary. How much taller are NBA players than students?

7) Explain how the plots helped you to examine heights of students and basketball players. In what ways were both graphs helpful. In what ways was a box plot more helpful? In what ways did a histogram help more?