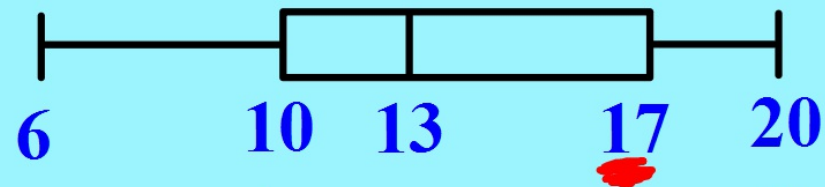


The box plot shows the average PPG for a HS basketball league (200 players):



1) What percent score more than 17 PPG?

25%

2) What percent score less than 13 PPG?

50%

3) How many score between 10 and 17 PPG?

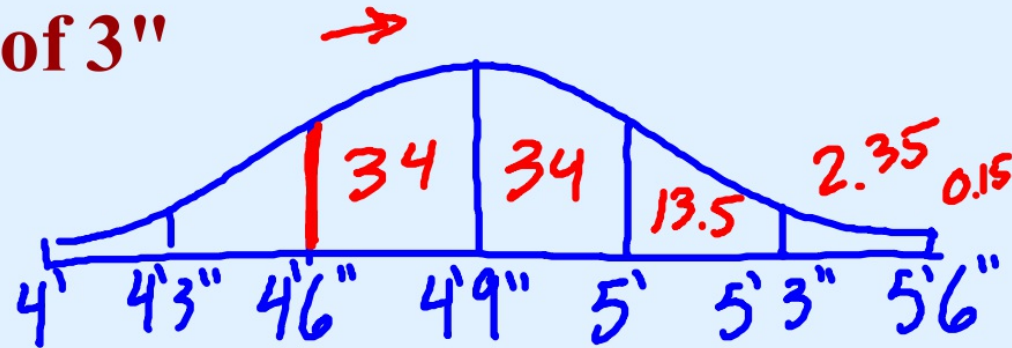
100 players

4) How many score more than 10 PPG?

150 players

The height of 500 middle school students is normally distributed with a mean of 4' 9" and a standard deviation of 3"

5) Draw the curve



6) What percent are above 4' 6" tall?

84%

7) What percent are between 4' 3" and 5' tall?

81.5%

8) How many are taller than 5' 6"?

$0.15\% \rightarrow 0.0015(500) = 0.75$

0 or 1

9) How many are shorter than 4' 3"?

12 or 13

10)

X	4	5	6	7	8	9	10
Y	12	18	21	22	20	17	11

a. What model would best fit?

Quadratic

b. Equation: $-1.14x^2 + 15.79x - 32.64$

c. Predict for $x = 11$ *3.11*

1. What is the median of each set of data?

Both 70

2. Which plot has the lesser range?

A

3. Which plot has the greater interquartile range?

B

4. What is the upper quartile of each set of data?

A: 80

B: 85

3rd Q

6. What is the least value in plot A?

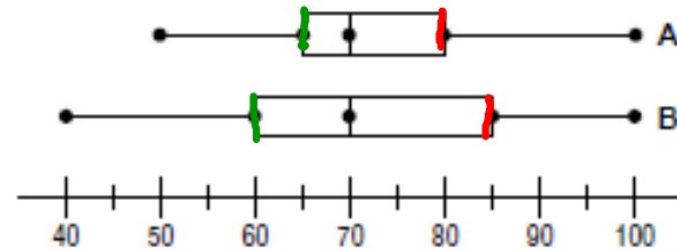
50

8. Which plot illustrates the larger range of data?

B

10. What percent of the data in plot A is greater than 80?

25%



5. What is the lower quartile of each set of data?

A: 65

B: 60

1st Q

7. What is the greatest value in plot B?

100

9. What percent of the data in plot B is between 60 and 85?

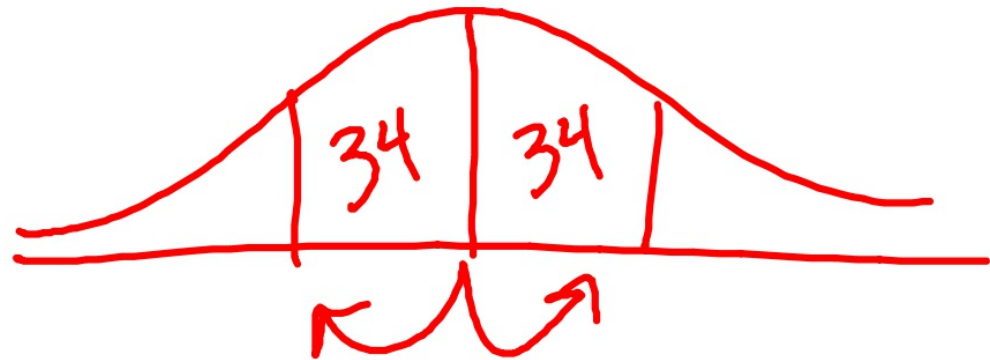
50%

11. What percent of the data in plot A is less than 65?

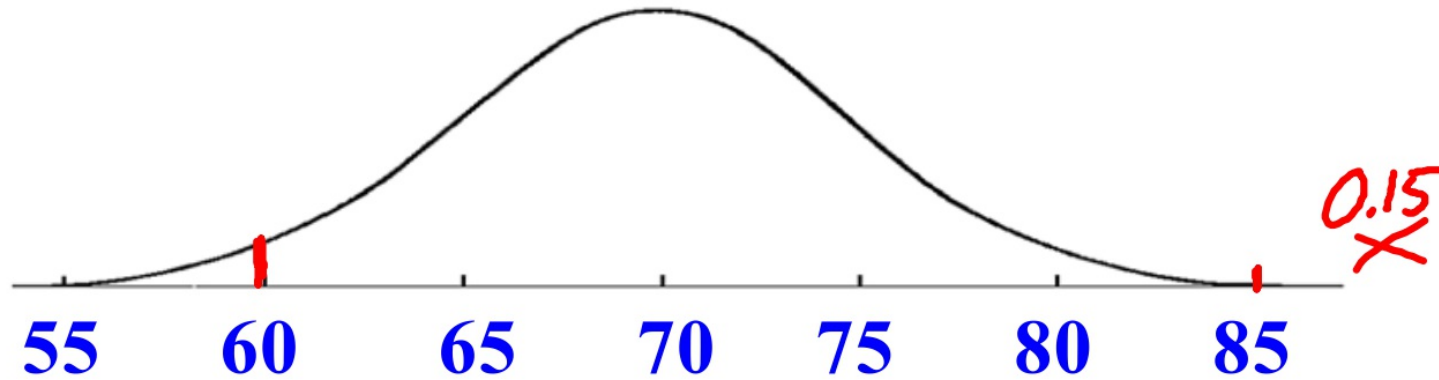
25%

In a normal distribution, what percent of the values lie:

1. below the mean? *50%*
2. above the mean? *50%*
3. within one standard deviation of the mean? 68%
4. within two standard deviations of the mean? 95%
5. within three standard deviations of the mean? 99.7%



6) 2000 freshmen at State University took a biology test. The scores were distributed normally with a mean of 70 and a standard deviation of 5. Label the mean and three standard deviations from the mean below:



Answer the following questions based on the distribution curve:

a. What percent of scores are between 65 and 75?

68%

b. What percent of scores are between 60 and 70?

47.5%

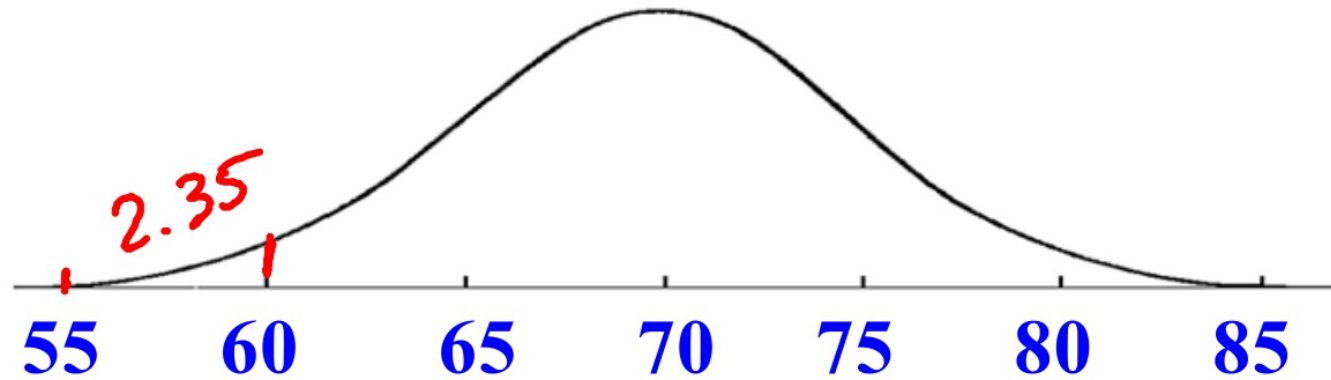
c. What percent of scores are between 60 and 85?

97.35%

d. What percent of scores are less than a 55?

0.15%

6) **2000** freshmen at State University took a biology test. The scores were distributed normally with a mean of 70 and a standard deviation of 5. Label the mean and three standard deviations from the mean below:



Answer the following questions based on the distribution curve:

e. What percent of scores are greater than an 80?

2.5%

f. Approximately how many biology students scored between 60 and 70?

950 students

g. Approximately how many biology students scored between 55 and 60?

$2.35\% \rightarrow 0.0235(2000) = 47$ students

h. Approximately how many biology students scored above a 75?

320 students

Unit 6: Statistics

Mixed Practice

Measures of Center
Measures of Spread

Box Plots
Normal Distributions

Assignment::

WB 606 Due Thu

#1-20; E.C. #21

WB 608 Due Fri

WB 603 (EC) Due Fri