

Team Stats

BLUE TEAM

Minimum: _____ Mean: _____ 25th %-tile: _____
 Maximum: _____ Mode: _____ Median: _____
 Range: _____ 75th %-tile: _____

Sketch the histogram	Sketch the box and whisker plot
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GREEN TEAM

Minimum: _____ Mean: _____ 25th %-tile: _____
 Maximum: _____ Mode: _____ Median: _____
 Range: _____ 75th %-tile: _____

Sketch the histogram	Sketch the box and whisker plot
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RED TEAM

Minimum: _____ Mean: _____ 25th %-tile: _____
 Maximum: _____ Mode: _____ Median: _____
 Range: _____ 75th %-tile: _____

Sketch the histogram	Sketch the box and whisker plot
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Go Team!

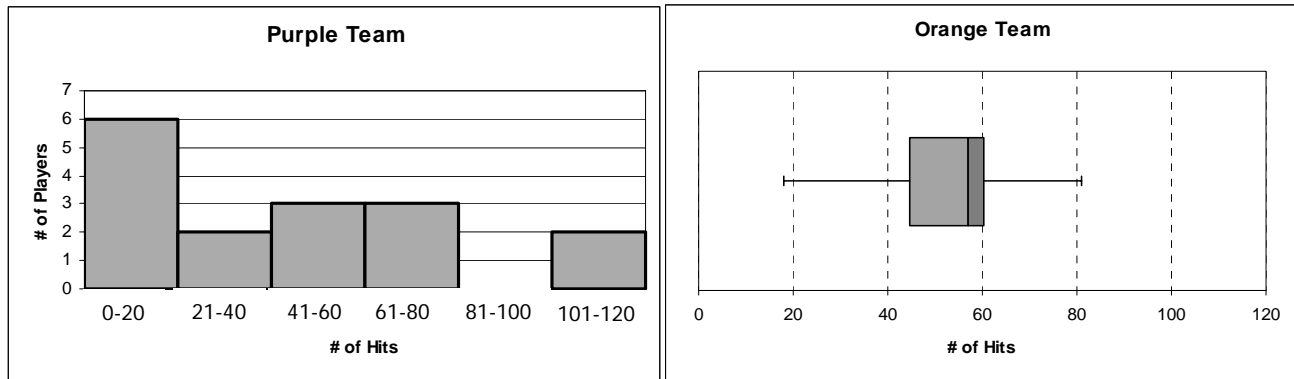
Use the terms in the word bank below to complete the statements about the statistics and graphic representations in your calculator. Each term can be used only once.

median	Red	mode	Blue
Green	range	outlier	mean

1. The box and whisker plot of the _____ Team has the longest whisker. This is usually an indication that the set of data contains at least one _____ .
 2. The _____ of the data is the central tendency for which the graphic representations give us the least information.
 3. The graphic representation with the smallest box (on the box and whisker plot) for the _____ Team reflect the fact that the number of hits for many of the players on that team is close to the _____.
 4. While the data for each of the three teams is very different, the _____ number of hits was the same for all.
 5. The _____ and Red Teams both have players with more than 100 hits.
 6. The _____ of the number of hits was the smallest for the Green Team.
-
-
7. If you got the choice to join any of these teams for next season, which would it be? Explain using statistics and/or the graphical representation(s) to justify your selection. (Go to the **Graphs** worksheet to make it easier to see all at the same time.)

Purple or Orange? (hard copy of Microsoft Word file)

Below are graphical representations of the number of hits last season by members of the Purple and Orange teams.



Hard Hitting Harold (H^3 for short) has offers to join either the Purple team or the Orange team. H^3 had 100 hits last season.

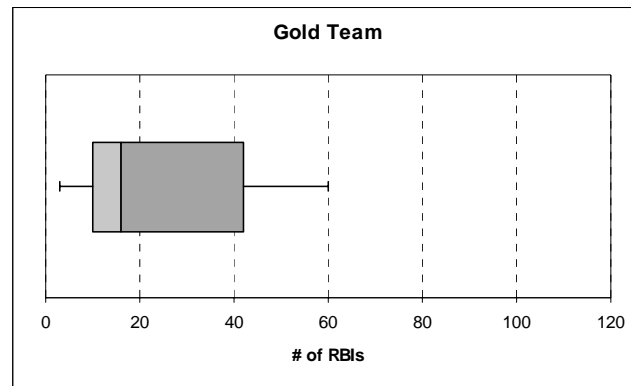
As a local sports reporter, you have been given the task of analyzing the impact for each team, should H^3 join either the Purple or the Orange team. You must base your analysis on what you can gather from the graphical representations you have been given.

Use either a word processor to create a newsletter or presentation software to create a slide show that will communicate your interpretations. Copy and paste the graphical representations into your newsletter or slide show and use the drawing tools to help make your points. Your newsletter or slide show should answer the following questions.

1. From the given graphical representations, what do you know about the spread of the data (numbers of hits per player) for the Purple team? for the Orange team? (Include a "discussion" of any clusters, gaps, and/or outliers.)
2. Should H^3 join the team, how would his number of hits (100) impact the current spread of the data for the Purple team? for the Orange team?
3. From the given graphical representations, what do you know about the current range, median, and mean number of hits for the Purple team? for the Orange team?
4. Should H^3 join the team, what would be the impact on the range, median, and mean number of hits for the Purple team? for the Orange team?
5. In your opinion, which team would benefit the most from having H^3 join their team?
6. As an added note or disclaimer, compare and contrast the amount and type of information you were able to get from the histogram versus the box and whisker plot when you addressed questions #1 and 3. What information might you get from a histogram that you would not get from a box and whisker plot? What information might you get from a box and whisker plot that you would not get from a histogram?

Pure Gold

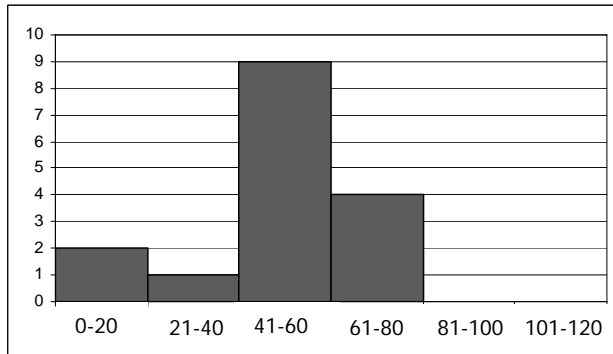
You have just been hired to take over as manager of the Gold Team. Currently, a plot of the number of RBIs (runs batted in) by the members of your team is shown below.



Your first task will be to add 3 players (to replace 3 that retired) to the team to meet these goals.

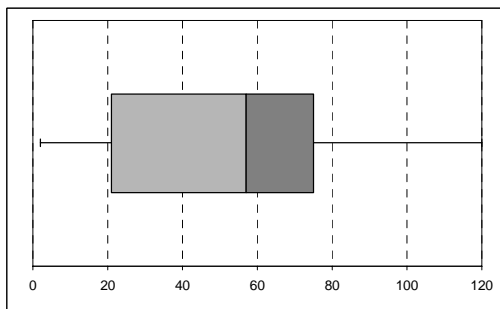
- Do not increase the current range of RBIs.
 - Keep the various numbers of RBIs as clustered around the median as possible.
- a. Input the RBIs for the players currently on the team in L1.
3, 15, 8, 20, 45, 16, 39, 10, 10, 42, 60, 55, 5
 - b. Add 3 players to get the desired results. The RBIs for the players available to join your team are 65, 18, 22, 6, and 30.
 - c. Prepare a statement for the press that lists the RBIs of the players you added and describes the impact of these additions on each of the following statistical measures for your team. Justify your statement by including the amount of change (if any) from the original statistics and original box and whisker plot, along with how these additions might benefit the team.
 - Range
 - Median
 - Mean

1.

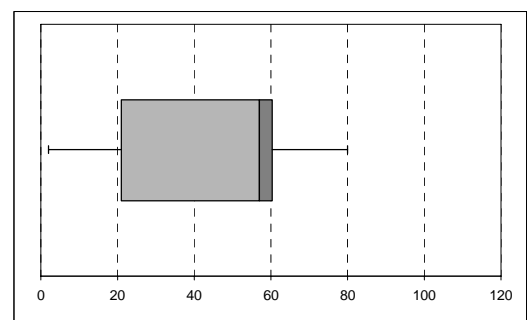


Which of the following box and whisker plots would contain data similar to the histogram above?

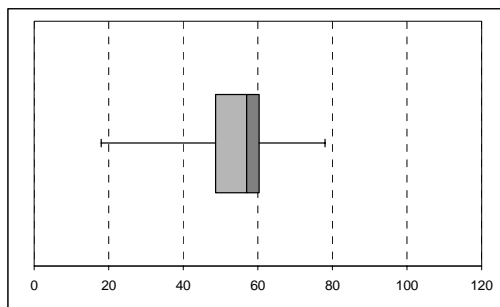
A.



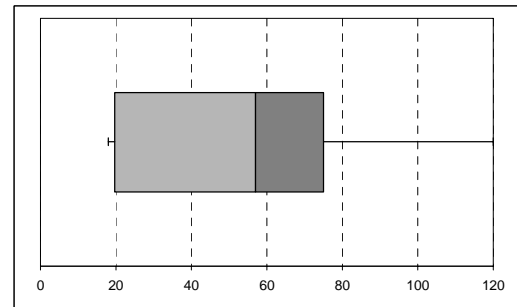
C.



B.



D.

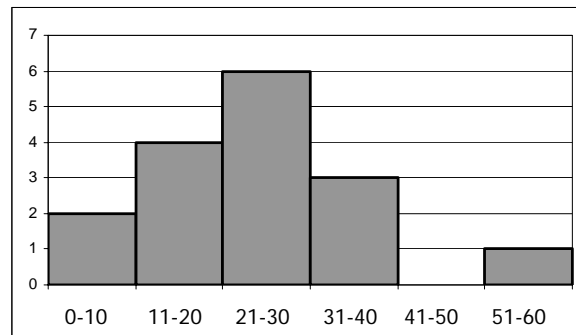


2. Which statistical measure is **not** evident on a box and whisker plot?

- A. range
- B. median
- C. mode
- D. all are evident

Use the following graph to answer questions 3 and 4.

A police officer sat on the side of the road and monitored the speed of the traffic with a radar gun. The histogram below represents the speeds of the first sixteen cars to go by.



3. What was the range in speed of the cars?
 - A. 60 mph
 - B. 6 mph
 - C. 50 mph
 - D. not enough information

4. If the road the officer was monitoring was a school zone (speed limit of 20 mph), how many of those cars were speeding?
 - A. 10
 - B. 40
 - C. 6
 - D. not enough information