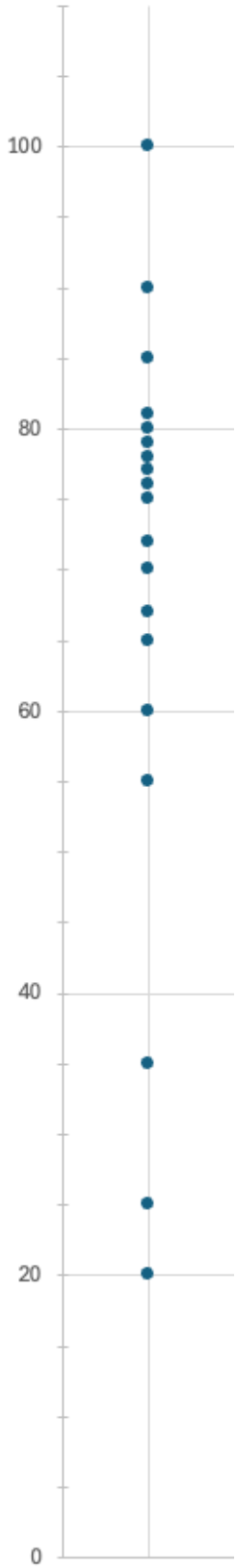
Box Plots (Box and Whisker Plots). Name: _____

This worksheet will lead you through creating a box plot of the data on the right. Data points are all integers.

1. Find the median (middle value) of the dots. There are 19 data points. Median = _____.
2. Draw a horizontal line across the median value's dot.
3. The first quartile value, Q1, is the point for which roughly ¼ of the data falls below. It is the middle value of points less than the median. Q1 = _____.
4. The third quartile value, Q3, is the middle value of the points larger than the median. Q3 = _____.
5. Label Q1, Q3 on the axis next to the points.
6. Draw a box around the data points starting at Q1 and going up to Q3. The median line from step 2 should go all the way across the box.
7. The inner quartile range (IQR) is the difference between Q3 and Q1. IQR = _____.
8. We use the value 1.5*IQR to determine the whiskers of the plot. 1.5 * IQR = _____.
9. Mark the axis with W1 at the value Q1 – 1.5*IQR.
10. Mark the axis with W2 at the value Q3 + 1.5*IQR.
11. Draw a horizontal line across the smallest data point larger than or equal to W1.
12. Draw a horizontal line across the largest data point less than or equal to W2.
13. Draw a vertical line from the bottom of the box to the line you drew in step 11.
14. Draw a vertical line from the top of the box to the line you drew in step 12.
15. Any points below the lower whisker or above the upper whisker are outliers. Mark outliers with a larger dot.
16. The mean of this data is 67.9. Mark that location inside the box with an X.



You have created a box and whisker plot for this data.