

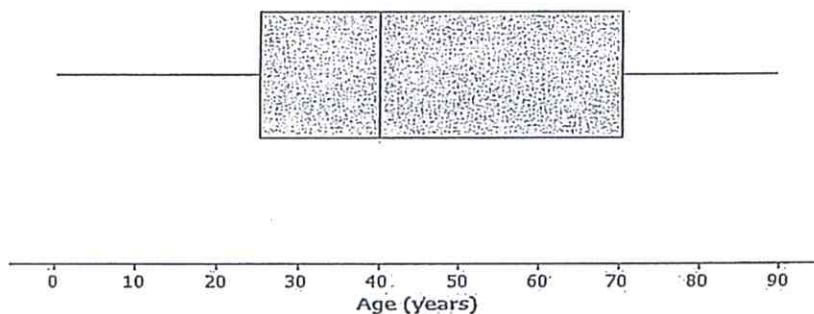
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## Lesson Summary

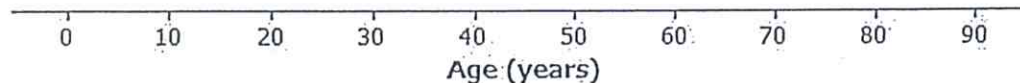
- Histograms show the general shape of a distribution.
- Box plots are created from the 5-number summary of a data set.
- A box plot identifies the median, minimum, and maximum values, and the upper and lower quartiles.
- The interquartile range (IQR) describes how the data is spread around the median; it is the length of the interval that contains 50% of the data values.
- The median is used as a measure of the center when a distribution is skewed or contains outliers.

The following box plot summarizes ages for a random sample from a made up country named Math Country.

Boxplot of Ages for Sample From Math Country



1. Make up your own sample of forty ages that could be represented by the box plot for Math Country. Use a dot plot to represent the ages of the forty people in Math Country.



2. Is the sample of forty ages represented in your dot plot of Math Country the only sample that could be represented by the box plot? Explain your answer.