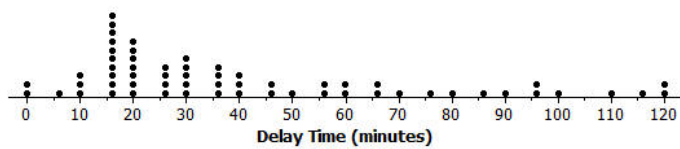Transportation officials collect data on flight delays (the number of minutes past the scheduled departure time that a flight takes off).
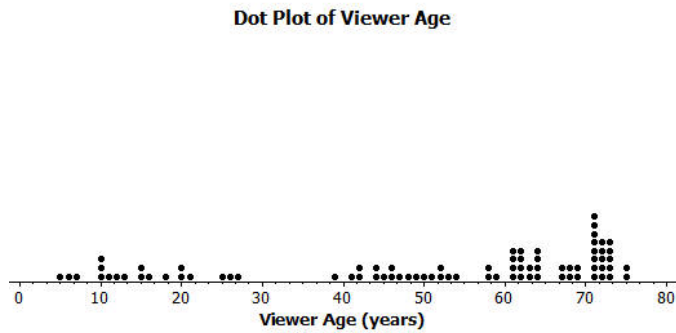
Consider the dot plot of the delay times for sixty BigAir flights during December 2012.

Dot Plot of December Delay Times

1. What do you think this graph is telling us about the flight delays for these sixty flights?

2. Can you think of a reason why the data presented by this graph provide important information? Who might be interested in this data distribution?

3. Based on your previous work with dot plots, would you describe this dot plot as representing a symmetric or a skewed data distribution? (Recall that a skewed data distribution is not mound shaped.) Explain your answer.

A random sample of eighty viewers of a television show was selected. The dot plot below shows the distribution of the ages (in years) of these eighty viewers.

Dot Plot of Viewer Age

Viewer Age (years)

4. What do you think this graph is telling us about the ages of the eighty viewers in this sample?

5. Can you think of a reason why the data presented by this graph provide important information? Who might be interested in this data distribution?

6. Based on your previous work with dot plots, would you describe this dot plot as representing a symmetric or a skewed data distribution? Explain your answer.

7. Twenty-five people were attending an event. The ages of the people are as follows:

3, 3, 4, 4, 4, 4, 5, 6, 6, 6, 6, 6, 6, 6, 7, 7, 7, 7, 7, 7, 16, 17, 22, 22, 25.

a. Create a dot plot of the ages on your own axes.

b. Would you describe your graph as symmetrical or skewed? Explain your choice.

c. Identify a typical age of the twenty-five people.

d. What event do you think the twenty-five people were attending? Use your histogram to justify your conjecture.