



# The Shape of Data Distributions

Let's explore various shapes of data.

## 4.1

## Math Talk: Number Line Distance

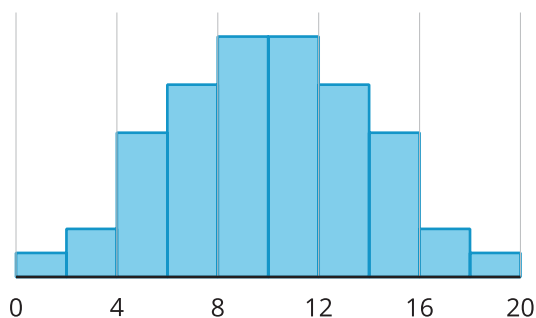
Mentally find the distance between the two values on a number line.

- 70 and 62
- 70 and 70
- 70 and 79
- 70 and 97

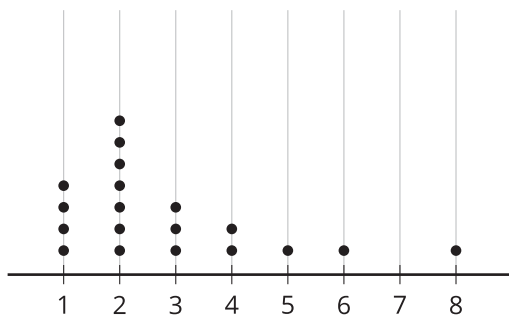
## 4.2 Suspicious Descriptions

For each picture and description:

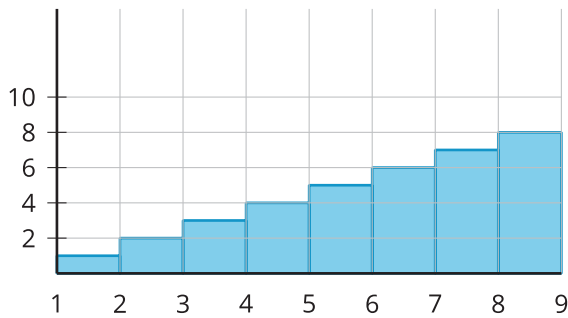
- Do you agree or disagree with the description?
  - If you agree, explain how you know it is correct.
  - If you disagree, explain the error and write the correct description. Explain how you know it is correct.
1. The distribution is bell-shaped since there is a central peak for symmetric data that is less frequent on the ends.



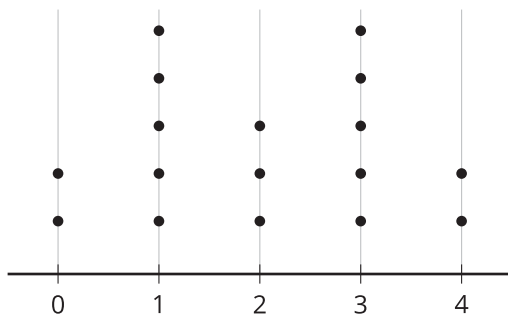
2. The distribution is symmetric because if the distribution were cut in half, both sides would be the same shape.



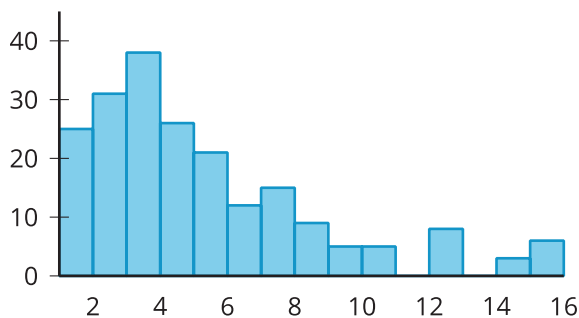
3. The distribution is uniform because there seems to be the same amount of data points across the entire distribution.



4. The distribution is symmetric because if the distribution were cut in half, both sides would be the same shape.



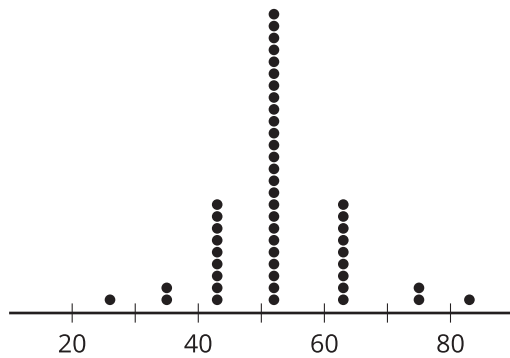
5. The distribution is skewed left since most of the data is on the left side of the distribution.



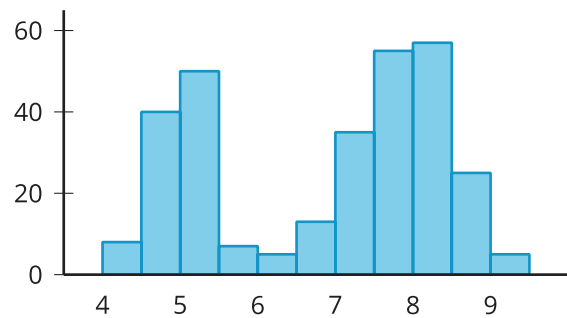
## 4.3 Data Shapes

Describe the shape of each distribution using the term “approximately,” “symmetric,” “bell-shaped,” “skewed left,” “skewed right,” “uniform,” or “bimodal.” Estimate the center of each distribution.

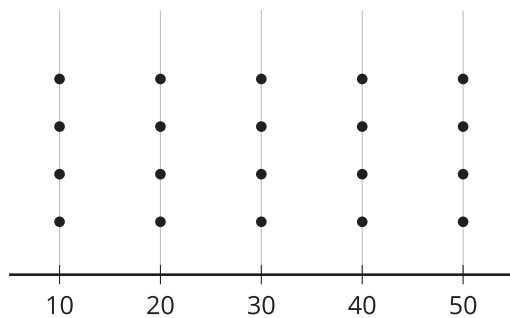
**A**



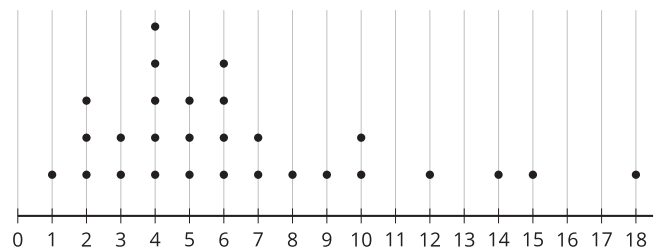
**B**

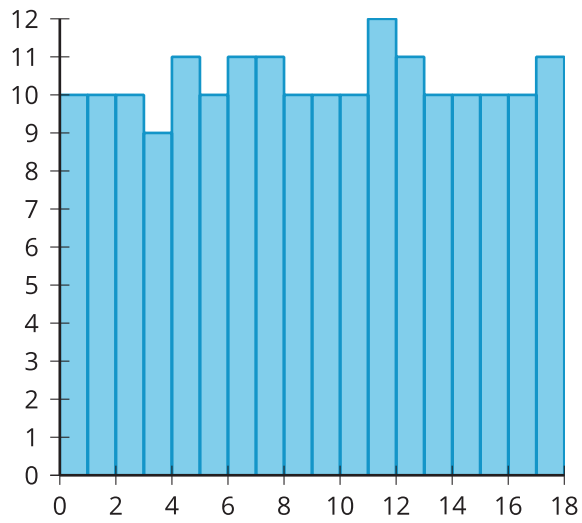
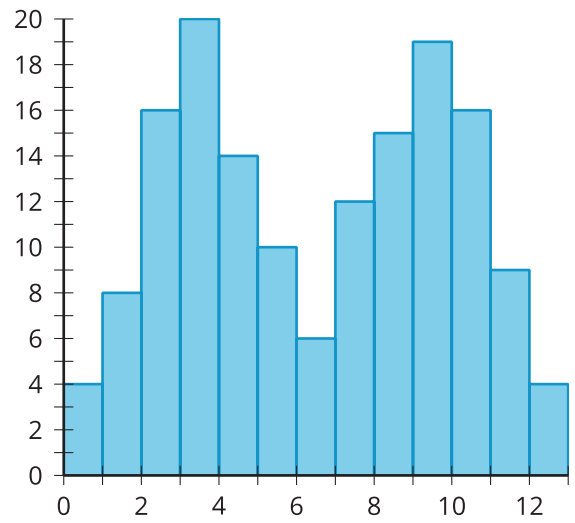
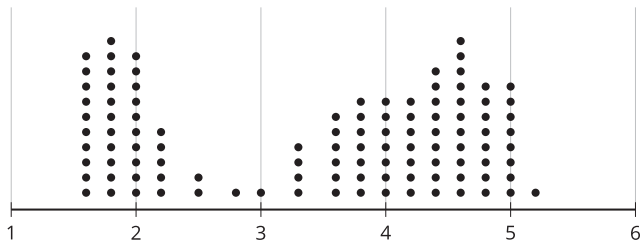


**C**



**D**



**E****F****G****H**