Unit 1 Lesson 4: The Shape of Data Distributions

1 Math Talk: Number Line Distance (Warm up)

Student Task Statement

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

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

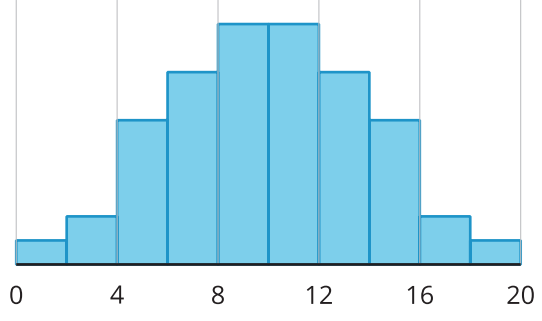
2 Suspicious Descriptions

Student Task Statement

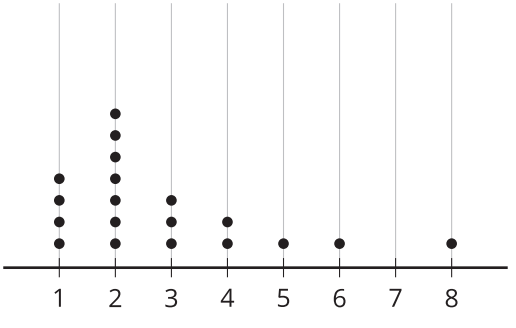
For each picture and description:

- 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.

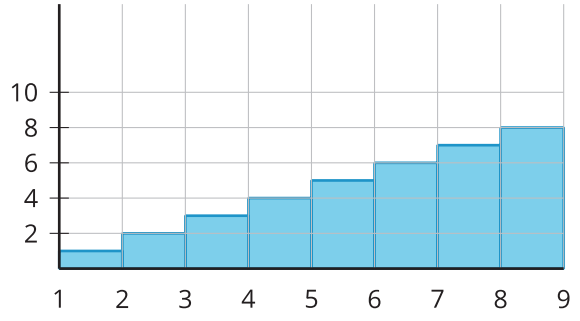
Bell-shaped since there is a central peak for symmetric data that is less frequent on the ends.



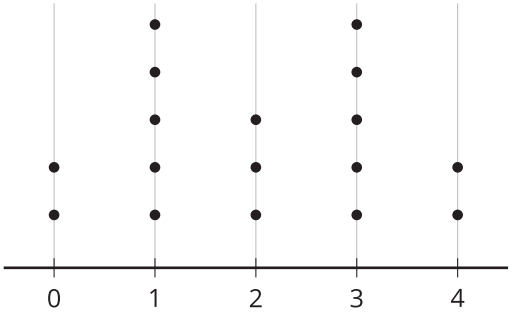
Symmetric because if the distribution was cut in half, both sides would be the same shape.



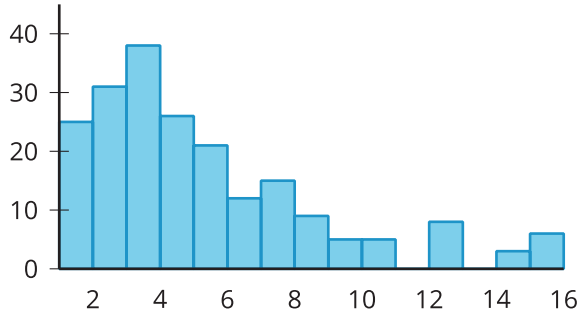
Uniform because there seems to be the same amount of data points across the entire distribution.



Symmetric because if the distribution was cut in half, both sides would be the same shape.



Skewed left since most of the data is on the left side of the distribution.

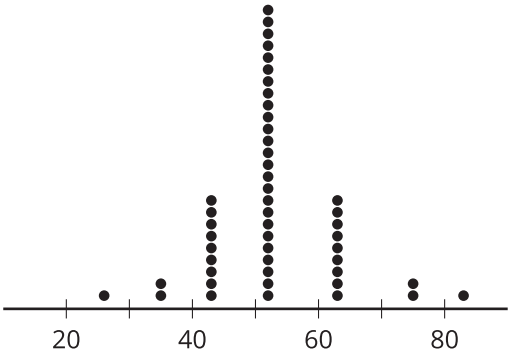


3 Whipping Data into Shape

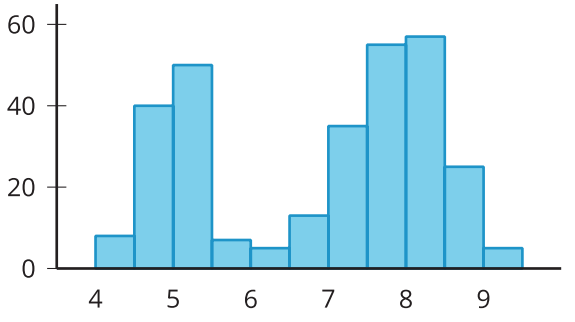
Student Task Statement

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

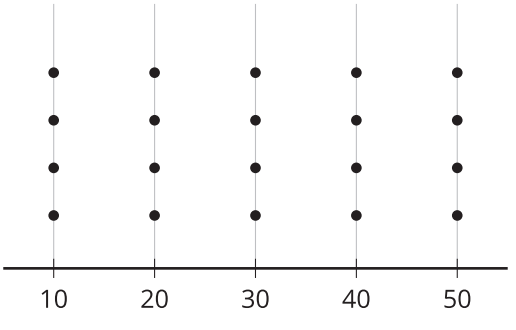
A



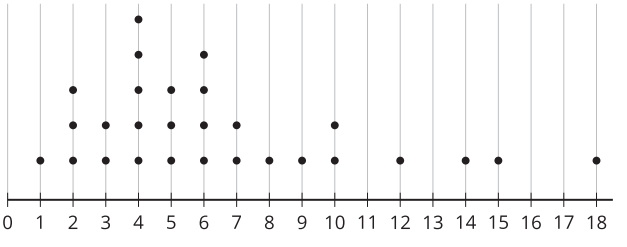
B



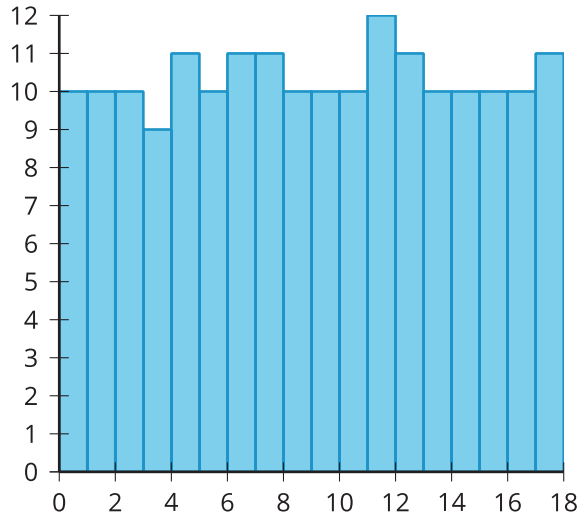
C



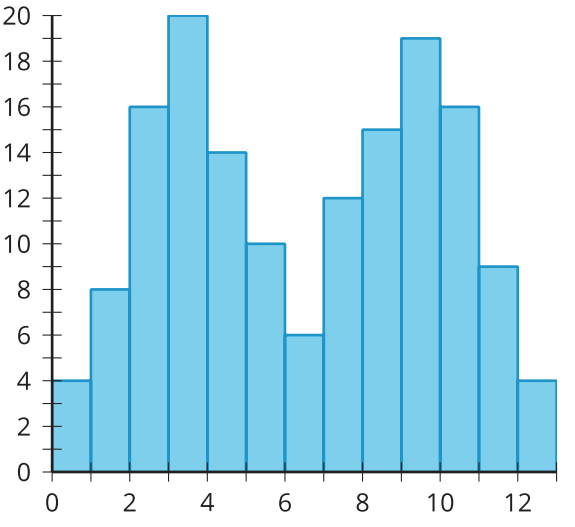
D



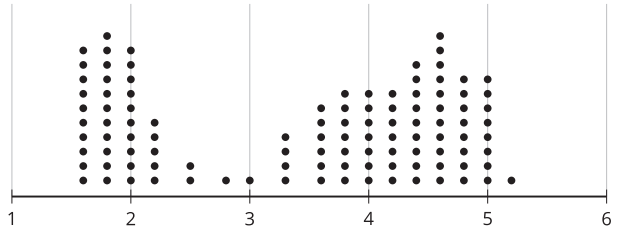
E


12
11
10
9
8
7
6
5
4
3
2
1
0
0 2 4 6 8 10 12 14 16 18

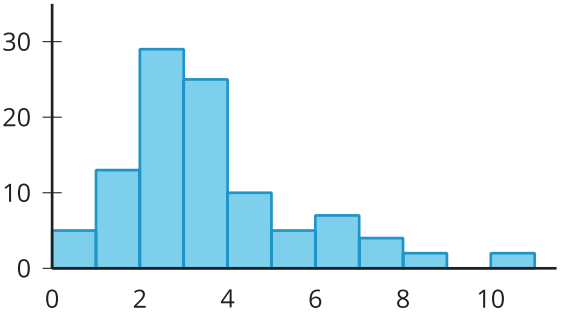
F


20
18
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12

G


1 2 3 4 5 6

H


30
20
10
0
0 2 4 6 8 10