

10.3 SHAPES OF DISTRIBUTION

Guided Notes


The Meaning of a Word ● Skewed

When something is **skewed**,

it has a slanted

or

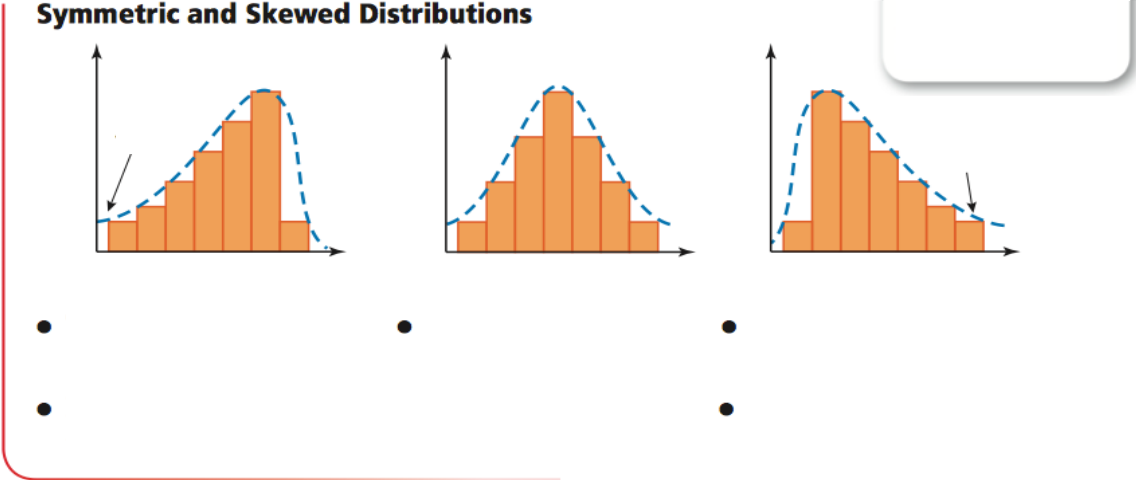


Study Tip 

If all the dots of a dot plot or bars of a histogram are about the same height, then the distribution is a

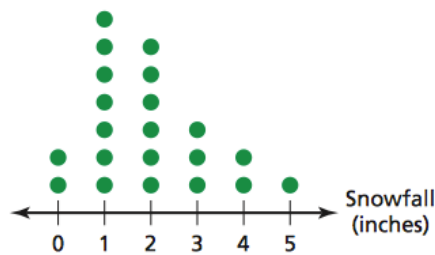
Key Ideas

Symmetric and Skewed Distributions



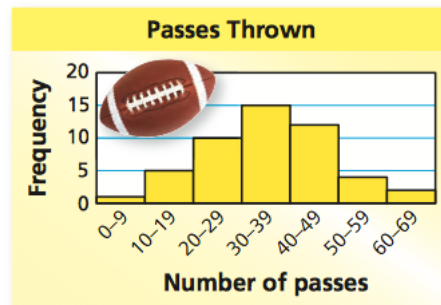
EXAMPLE 1 Describing the Shapes of Distributions

a. Daily Snowfall Amounts



∴ So, the distribution is

b. Passes Thrown



∴ So, the distribution is

EXAMPLE 2 Describing the Shape of a Distribution

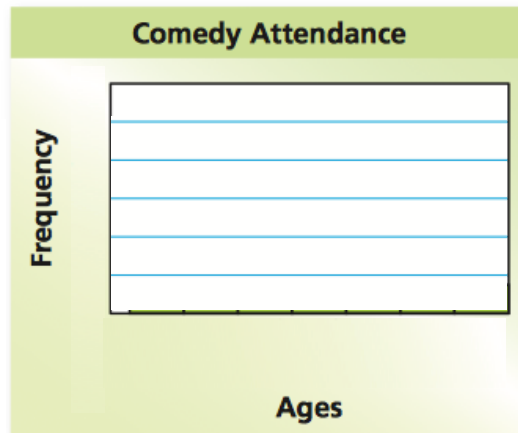
2

The frequency table shows the ages of people watching a comedy in a theater. Display the data in a histogram. Describe the shape of the distribution.

Draw and label the axes. Then draw a bar to represent the frequency of each interval.

Ages	Frequency
10-13	1
14-17	3
18-21	7
22-25	12
26-29	20
30-33	18
34-37	3

So, the distribution is

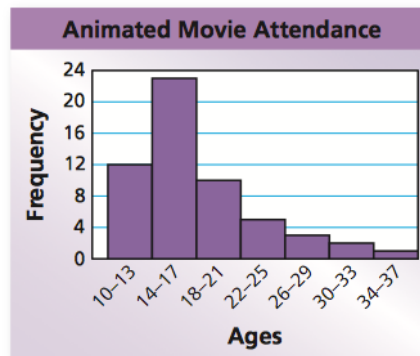


EXAMPLE 3 Comparing Shapes of Distributions

The histogram shows the ages of people watching an animated movie in the same theater as in Example 2.

- a. Describe the shape of the distribution.

So, the distribution is



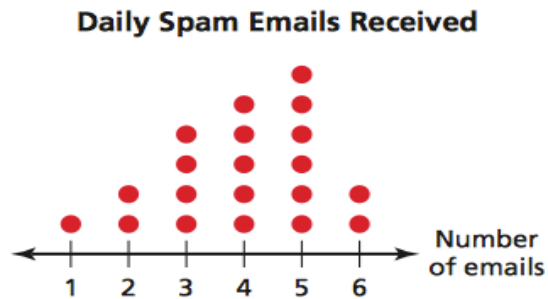
- b. Which movie has an older audience?

The _____ in the histograms are _____ Most of the data for the animated movie are _____ while most of the data for the comedy are _____. This means that the people watching the _____ are generally _____ than the people watching the _____ movie.

So,

On Your Own 10.3

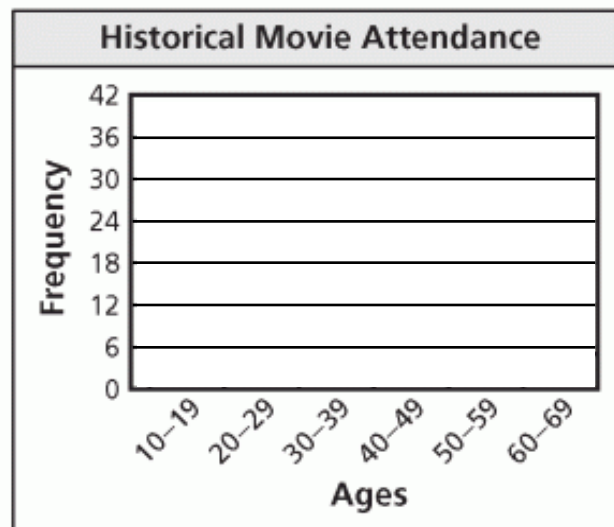
- Describe the shape of the distribution.



- The frequency table shows the ages of people watching a historical movie in a theater.

Ages	10–19	20–29	30–39	40–49	50–59	60–69
Frequency	3	18	36	40	14	5

- Display the data in a histogram. Describe the shape of the distribution.



- Compare the distribution of the data to the distributions in Examples 2 and 3. What can you conclude?