

Section 12.3 Worksheet

Name \_\_\_\_\_

For Exercises 1-3, find the range for the group of data items.

1. 6, 7, 8, 9, 10

4

2. 7, 7, 7, 18, 26, 26, 26

19

3. 3, 19, 3, 19, 3, 19, 3, 19

16

4. For the following group of data items the mean is 68.  
63, 63, 65, 68, 68, 68, 69, 70, 73, 73

a. Find the deviation from the mean for each of the data items

Data item	Deviation from the mean: Data item - mean
63	-5
63	-5
65	-3
68	0
68	0
68	0
69	1
70	2
73	5
73	5

b. Find the sum of the deviations in part a.

0

5. Find the mean and standard deviation for the given data set.

Country	Number of Television Sets per 100 People
A	126
B	96
C	131
D	111
E	116

a. mean

116

b. standard deviation (Round to two decimal places)

Data item	Deviation: Data item - mean	(Deviation) <sup>2</sup> : (Data item - mean) <sup>2</sup>
126	10	100
96	-20	400
131	15	225
111	-5	25
116	0	0

SD = 13.69

18

Name \_\_\_\_\_

6. Find the mean and standard deviation for the given data set.

**International Travel Destinations of U.S. Citizens in 2000**

Country	U.S. Citizens, in thousands
A	1000
B	600
C	220
D	200
E	150
F	105
G	103
H	102
I	90
J	80

a. mean

266

b. standard deviation (Round to two decimal places)

300.55

7. a. Compute the mean, range, and standard deviation for the data items in each of the two samples.

Sample X: 15, 17, 19, 21, 23, 25, 27

Sample Y: 15, 15, 15, 21, 27, 27, 27

$\bar{X}$

mean = 21  
range = 12  
SD = 4.32

$\bar{Y}$

mean = 21  
range = 12  
SD = 6

b. Find one way in which the samples are alike.

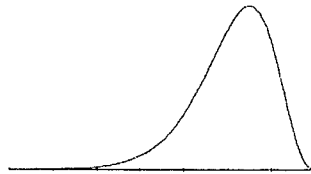
c. Find one way in which the samples are different.

} answers vary

# Worksheet--Skewness

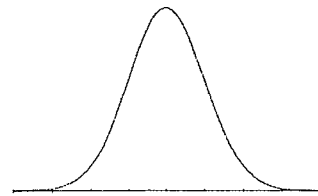
Describe the shape of the data.

A.



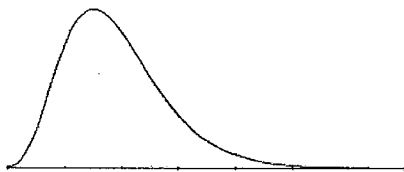
skewed left

B.



symmetric

C.



skewed right

D.

0| 13

1|

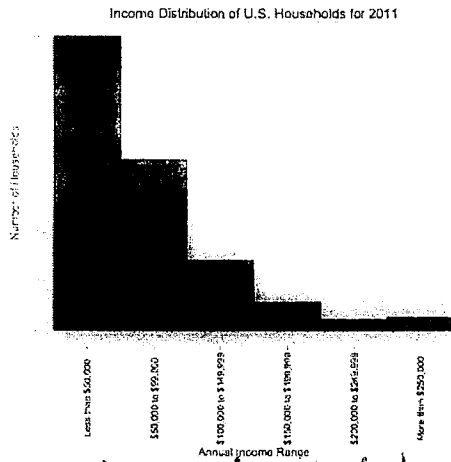
2| 035

3| 00123344

4| 0023344

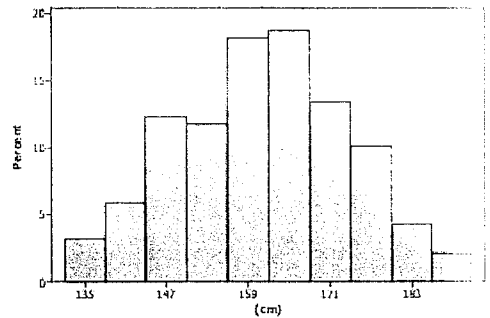
skewed left

E.



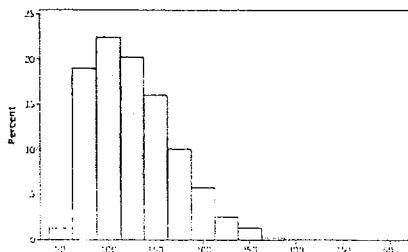
skewed right

F.



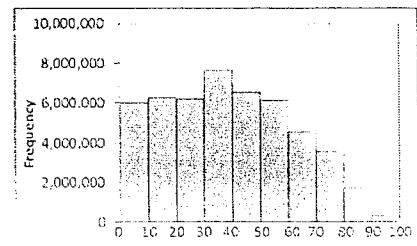
symmetric

G.



skewed right

H.



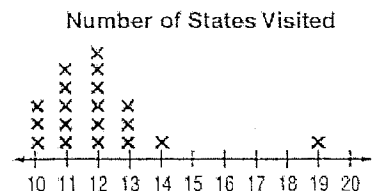
skewed right

I.



symmetric  
bimodal

J.



skewed right