

Provide an appropriate response.

- 1) The following frequency distribution analyzes the scores on a math test. a) Create a histogram, b) find the boundaries of the first class, c) find the class limits of the second class, d) find the midpoint of the third class. e) determine the width of each class

Scores	Number of students
40-59	2
60-75	4
76-82	6
83-94	15
95-99	5

Provide an appropriate response.

- 2) The frequency distribution below summarizes the home sale prices in the city of Summerhill for the month of June. a) Create a histogram, b) find the boundaries of the first class, c) find the class limits of the second class, d) find the midpoint of the third class. e) determine the width of each class

(Sale price in thousand \$)	Frequency
80.0 - 110.9	2
111.0 - 141.9	5
142.0 - 172.9	7
173.0 - 203.9	10
204.0 - 234.9	3
235.0 - 265.9	1

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Solve the problem.

- 3) Using a strict interpretation of the relevant criteria characterizing a normal distribution, does the frequency distribution below appear to have a normal distribution? 3) _____
 Does the distribution appear to be normal if the criteria are interpreted very loosely?

Closing Share Price	Frequency
0-5	2
6-10	5
11-15	15
16-20	27

Construct the cumulative frequency distribution that corresponds to the given frequency distribution.

4)

Speed	Number of cars
0-29	4
30-59	16
60-89	60
90-119	20

5)

Weight (oz)	Number of Stones
1.2-1.6	5
1.7-2.1	2
2.2-2.6	5
2.7-3.1	5
3.2-3.6	13

Provide an appropriate response.

6) The frequency distribution for the weekly incomes of students with part-time jobs is given below. Construct the corresponding relative frequency distribution. Round relative frequencies to the nearest hundredth of a percent if necessary.

Income (\$)	Frequency
200-300	61
301-400	51
401-500	87
501-600	88
More than 600	20

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Use the given data to construct a frequency distribution.

7) A medical research team studied the ages of patients who had strokes caused by stress.

7) _____

The ages of 34 patients who suffered stress strokes were as follows.

29 30 36 41 45 50 57 61 28 50 36 58
 60 38 36 47 40 32 58 46 61 40 55 32
 61 56 45 46 62 36 38 40 50 27

Construct a frequency distribution for these ages. Use 8 classes beginning with a lower class limit of 25.

Age	Frequency

8) Lori asked 24 students how many hours they had spent doing homework during the previous week. The results are shown below.

11 10 11 8 11 11 15 13 11 8 13 10
 10 13 11 10 13 11 10 13 10 13 13 8

Construct a frequency distribution. Use 4 classes, a class width of 2 hours, and a lower limit of 8 for

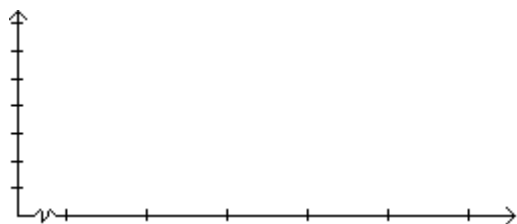
Hours	Frequency

8) _____

Provide an appropriate response.

9) In a survey, 20 people were asked how many magazines they had purchased during the previous year. The results are shown below. Construct a histogram to represent the data. Use 4 classes with a class width of 10, and begin with a lower class limit of -0.5. What is the approximate amount at the center?

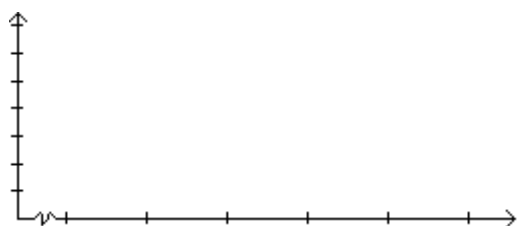
6 15 3 36 25 18 12 18 5 30
 24 7 0 22 33 24 19 4 12 9



9) _____

10) In a survey, 26 voters were asked their ages. The results are shown below. Construct a histogram to represent the data (with 5 classes beginning with a lower class limit of 19.5 and a class width of 10). What is the approximate age at the center?

43 56 28 63 67 66 52 48 37 51 40 60 62
 66 45 21 35 49 32 53 61 53 69 31 48 59



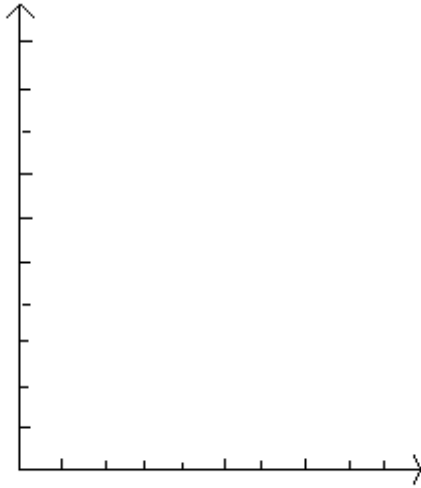
10) _____

11) The frequency table below shows the number of days off in a given year for 30 police detectives.

11) _____

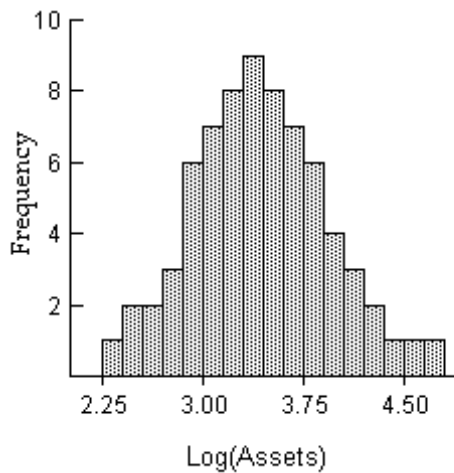
Days off	Frequency
0-2	10
3-5	1
6-8	7
9-11	7
12-14	1
15-17	4

Construct a histogram. Use the class midpoints for the horizontal scale. Does the result appear to be a normal distribution? Why or why not?



12) The histogram below shows the distribution of the assets (in millions of dollars) of 71 companies. Does the distribution appear to be normal?

12) _____



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Use the data to create a stemplot.

13) The following data show the number of laps run by each participant in a marathon.

13) _____

46 65 55 43 51 48 57 30 43 49 32 56

A)

```
3 | 0 2
4 | 3 3 6 8 9
5 | 1 5 6 7
6 | 5
```

B)

```
3 | 0 2
4 | 3 6 8 9
4 | 1 3 5 6 7
6 | 5
```

14) The attendance counts for this season's basketball games are listed below.

14) _____

227 239 215 219

221 233 229 233

235 228 245 231

A)

```
21 | 5 9
22 | 1 7 8 9
23 | 1 3 3 5 9
24 | 5
```

B)

```
21 | 5 7 9
22 | 1 8 9
23 | 1 3 3 5 9
24 | 5
```

15) The ages of the 45 members of a track and field team are listed below. Construct an expanded stemplot with about 8 rows.

15) _____

21 18 42 35 32 21 44 25 38 48 14 19 23 22 28

32 34 27 31 17 16 41 37 22 24 33 32 21 26 30

22 27 32 30 20 18 17 21 15 26 36 31 40 16 25

A)

```
1 | 4
1 | 5 6 6 7 7 8 8 9
2 | 0 1 1 1 1 2 2 2 3 4
2 | 5 5 6 6 7 7 8
3 | 0 0 1 1 2 2 2 2 3 4
3 | 5 6 7 8
4 | 0 1 2 4
4 | 8
```

B)

```
1 | 4 5
1 | 5 6 6 7 7 8 8 9
2 | 0 1 1 1 1 2 2 2 3 4 5 5
2 | 5 5 6 6 7 7 8
3 | 0 0 1 1 2 2 2 2 3 4 5
3 | 5 6 7 8
4 | 0 1 2 4
4 | 8
```