Worksheet

Class: _____ ( )

Name: _____

A. Graphical Representation of Data

1. Fill in the blanks with the words given below.

broken line graph	histogram	pie chart	stem-and-leaf diagram

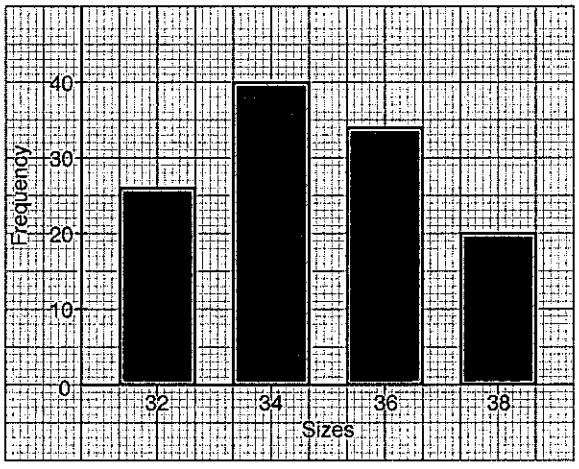
A _____ is a bar chart that represents grouped data.

A _____ is a circle divided into different sectors to represent different items.

A _____ consists of line segments joining points and can be used to show the trend of a series of data.

A _____ can show all the original data.

2. The following bar chart shows the number of T-shirts with different sizes sold yesterday.



(a) How many T-shirts are sold yesterday? _____

(b) Which size was the most popular? _____

(c) Draw a pie chart to represent the sales.

3. The following table shows the results of a test.

25	78	90	92	89	63	25	76	68	72
34	56	72	68	69	70	71	82	84	81
35	61	60	58	56	48	35	28	34	71
24	25	36	40	56	58	64	68	60	35

(a) Construct a stem-and-leaf diagram to represent the data.

Stem (tens digit)	**Leaf (unit digit)**
2	
3	
4	
5	
6	
7	
8	
9	

(b) If the passing mark is 40, find the percentage of students that passed the test.

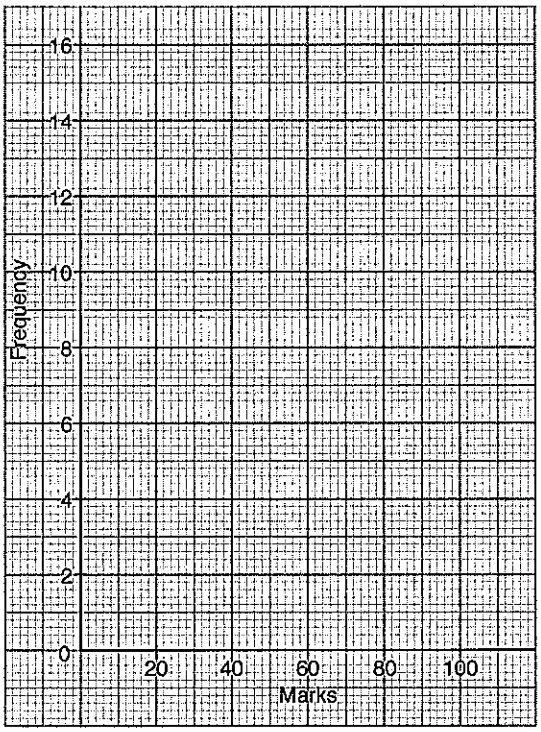
_____

_____

(c) If two students are selected at random, what is the probability that both of them get more than 80 marks?

(d) Construct a histogram with the following intervals.

Mark	20 – 39	40 – 59	60 – 79	80 – 99
Frequency				



B. Measures of Central Tendency

Find **(a)** the median and **(b)** the mean of each of the following sets of data.

1. 12, 17, 19, 24, 28

(a) median = _____

(b) mean = _____

2. 24, 25, 28, 32, 40, 47, 49

(a) median = _____

(b) mean = _____

3. 14, 47, 20, 24, 45, 42

(a) median = _____

(b) mean = _____

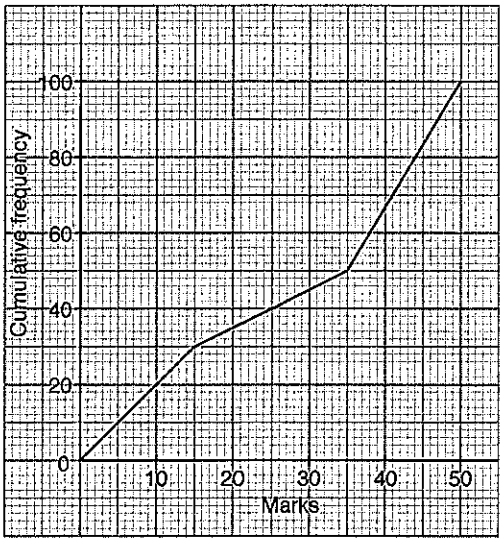
4. 8, 9, 5, 4, 14, 17, 19, 12

(a) median = _____

(b) mean = _____

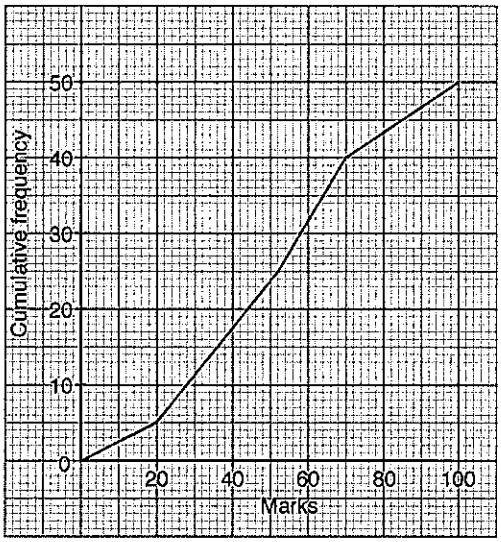
Find the median from the following cumulative frequency polygon.

5.



Median = _____

6.



Median = _____

Find the mode of each of the following sets of data.

7.

4	4	3	2	1
4	5	5	6	7
5	6	6	7	5

Mode = _____

8.

12	12	12	15
14	15	16	16
16	17	18	16

Mode = _____

9.

4.8	4.2	4.9	5.0
3.2	2.1	4.2	3.5
8.0	2.3	4.8	1.5

Mode = _____

10. Find **(a)** the mode, **(b)** the median and **(c)** the mean of the following data.

Number	1	3	5	7	9
Frequency	12	6	18	5	9

11. The following table shows the size of sports shoes that a class of students wear.

Size	36	37	38	39	40	41
Frequency	4	8	10	13	4	1

Find

(a) the mode;

(b) the median;

(c) the mean.

12. The following table shows the weights (in kg) of 80 dogs.

Weight (kg)	1 – 5	6 – 10	11 – 15	16 – 20	21 – 25
Frequency	12	16	18	19	15

(a) Find the modal class.

(b) Find the mean. (Give the answer correct to 1 decimal place.)

13. The following are the pulse rates of a class of students after basketball training exercises.

60	62	62	63	63	64	65	65
70	70	70	70	71	71	71	74
75	75	75	76	76	76	76	77
77	78	78	78	79	79	79	79
79	80	80	81	82	82	83	84

(a) Find the mode.

(b) Find the mean. (Give the answer correct to 1 decimal place.)

(c) What is the percentage of students with pulse rate higher than the mean?

END