

Name: _____

Form: _____

STATISTICS

Quartiles & Class Features

Question 1:

Match the class feature to the correct definition (make sure the lines touch both the name and the description):

Class Boundary	$(\text{lower class limit} + \text{upper class limit}) / 2$
Class Interval	lowest and highest possible values within the class
Class Midpoint	difference between the upper and lower class limits
Class Limit	point midway between two classes, separating them

[4 marks]

Question 2: Multiple-choice Section

1) How many sections do quartiles separate the data into?

- a. 2 b. 3 c. 4 d. 5

2) Which quartile is the same as the median?

- a. Q1 b. Q2 c. Q3

3) Which class feature is shared by two classes?

- a. Boundary b. Interval c. Limit d. Midpoint

[3 marks]

Question 3:

Table 1: Frequency Table of Heights of Persons in a Survey

HEIGHT (cm)	FREQUENCY
≤ 100	5
101 – 125	13
126 – 150	18
151 – 175	29
176 – 200	9
≥ 201	1

- a) What is the frequency of the 3rd class? Ans = _____
- b) What is the modal class? Ans = _____
- c) What is the midpoint of the 176 – 200 class? Ans = _____

[4 marks]

Question 4:

- a. Find the quartiles for the following data set:

101, 73, 50, 78, 39, 82, 26

Q1 = _____

Q2 = _____

Q3 = _____

What is the median of this data set? Ans = _____

b. Find the quartiles for the following data set:

15, 23, 20, 18, 27, 19, 23, 25

Q1 = _____

Q2 = _____

Q3 = _____

Question 5:

Fill in the table with the missing values for the different class features:

Category	Lower Limit	Upper Limit	Lower Boundary	Upper Boundary	Class Interval	Midpoint
15 – 24				24.5	9	
25 – 34	25					29.5
35 – 44			34.5	44.5		
45 – 54	45	54				

b) What would be the **upper limit** of the class before the 15 – 24 category (if it existed)?

Ans = _____

c) What would be the **lower limit** of the class after the 45 – 54 category (if it existed)?

Ans = _____

[10 marks]