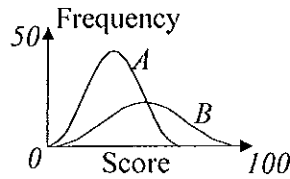


CD1 – Worksheet 2

Choose the correct answer. Mark your answer on the sheet provided.

1)



The graph shows the frequency curves for two sets of test results, A and B .

\bar{x}_A = mean of A , σ_A = standard deviation of A , \bar{x}_B = mean of B , σ_B = standard deviation of B . Which of the following is true?

- (A) $\bar{x}_A > \bar{x}_B$ and $\sigma_A < \sigma_B$
- (B) $\bar{x}_A < \bar{x}_B$ and $\sigma_A > \sigma_B$
- (C) $\bar{x}_A < \bar{x}_B$ and $\sigma_A < \sigma_B$
- (D) $\bar{x}_A > \bar{x}_B$ and $\sigma_A > \sigma_B$

2)

Score	Frequency
11	5
12	4
13	1
14	6
15	4

A score of 13 is added to this sample. Which measure will change?

- (A) median
- (B) range
- (C) mode
- (D) mean

3)

The same class sat for tests in English, Mathematics and Science. Esti's results are shown below:

TEST	CLASS MEAN	CLASS STANDARD DEVIATION	ESTI'S MARK
ENGLISH	75	5	80
MATHEMATICS	55	15	80
SCIENCE	60	10	80

In which test did Esti perform best, compared to the rest of her class?

- (A) English
- (B) Mathematics
- (C) Science
- (D) She performed as well in all three tests

4)

Suzie has an average mark of 60 for 6 tests. There are only two more tests, both out of 100. What is the highest average Suzie could have after all the tests are completed?

- (A) 70
- (B) 80
- (C) $86\frac{2}{3}$
- (D) $93\frac{1}{3}$

CD1 – Worksheet 2

- 5) David scored 120 goals in 12 games, with a best performance of 15 goals. Consider the following statements:
- I. His mean score is 10 goals.
 - II. His mode score is 15 goals.

Which must be true?

- (A) I only
 - (B) II only
 - (C) Both I and II
 - (D) Neither I nor II
- 6) The following statistics were obtained from Year 10 English and Science tests:

SUBJECT	MEAN	STANDARD DEVIATION
English	60	6
Science	70	8

What mark in Science would be equivalent to a mark of 66 in English?

- (A) 68
 - (B) 76
 - (C) 77
 - (D) 78
- 7) A shop assistant in a book store wrote down the number of books bought by each of the people entering the shop during one hour. The results are shown below.

NUMBER OF BOOKS BOUGHT	NUMBER OF PEOPLE
0	10
1	11
2	6
3	1
4	1
5	1

How many books were bought during this hour?

- (A) 15
 - (B) 30
 - (C) 35
 - (D) 45
- 8) For the two sets of scores,
- Set A: 4, 6, 7, 17, 18, 20
- Set B: 2, 8, 9, 15, 16, 22
- consider these statements:
- I. Both sets have the same mean.
 - II. Both sets have the same standard deviation.

Which is correct?

- (A) I only
- (B) II only
- (C) Both I and II
- (D) Neither I nor II

CDI – Worksheet 2

9)

TEST	KIM'S MARK	CLASS MEAN	CLASS STANDARD DEVIATION
TEST A	86	80	10
TEST B	82	65	15
TEST C	79	60	20
TEST D	70	60	10

On which test did Kim perform best in comparison with the rest of the class?

- (A) TEST A (B) TEST B (C) TEST C (D) TEST D

10)

SCORE	FREQUENCY
1	8
2	5
3	5
4	3
5	3
	24

The median of this set of scores is

- (A) 1 (B) 2 (C) 2.5 (D) 3

[Answers]

- 1) → C »
2) → A »
3) → C »
4) → A »
5) → A »
6) → D »
7) → C »
8) → C »
9) → B »
10) → B »