TB(2A) Ch. 7 More about Statistical Charts Multiple Choice Questions

1. [16-17 s.2 Mid-year Exam, #9]

The pie chart below shows the distribution of four types of colour paper on the shelf. If there are 300 pieces of blue paper, how many pieces of red paper are there?

- **A.** 200
- **B.** 240
- **C.** 300
- **D.** 360

2. [16-17 s.2 Mid-year Exam, #10]

The table below shows the weights of 50 people. The class mark of the last interval is

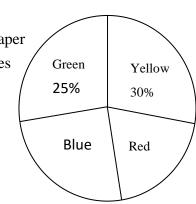
А.	65 kg.	В.	67 kg.
C.	67.5 kg.	D.	69.5 kg.

3. [16-17 s.2 Mid-year Exam, #19]

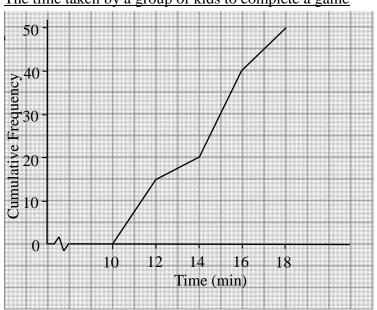
The cumulative frequency polygon below shows the time (in minutes) taken by a group of kids to complete a game.

How many kids spent 12 minutes or more to complete the game?

- **A.** 5
- **B.** 15
- **C.** 25
- **D.** 35



Weight(kg)	Frequency		
40 - 44	5		
45 - 49	8		
50 - 54	13		
55 - 59	11		
60 - 64	11		
65 – 69	2		



The time taken by a group of kids to complete a game

4. [16-17 s.2 Final Exam, #10]

All the students are assigned to one of the 6 houses at a school. Which statistical diagram should be used to show the percentage of students in each house?

- A. Bar chart
- **B.** Frequency polygon
- C. Pie chart
- D. Scatter diagram

5. [16-17 s.2 Final Exam, #18]

The following table shows the weights of students in S.2G.

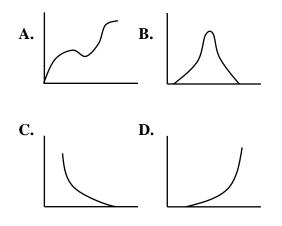
Weight (kg)	Number of students		
20 - 29	1		
30 - 39	2		
40 - 49	20		
50 - 59	10		
60 - 69	5		
70 – 79	2		

Which of the following is/are correct?

- I. The class mark of the class interval 70 kg 79 kg is 74.5 kg.
- II. The lower class boundary of the first class interval is 20 kg.
- III. The class width of the class interval 70 kg 79 kg is 9 kg.
- A. I only
- **B.** II only
- C. I and III only
- **D.** II and III only

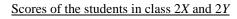
6. [17-18 s.2 Mid-year Exam, #9]

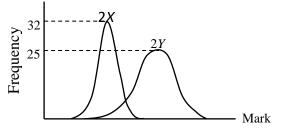
Which of the following is a cumulative frequency curve?



7. [17-18 s.2 Mid-year Exam, #18]

The distributions of the examination results of students in 2 classes are shown in the figure. Which of the following must be true?

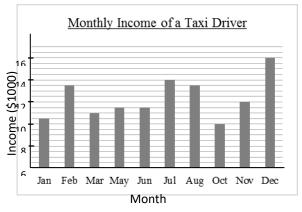




- I. There are 32 students in class 2X and 25 students in class 2Y.
- II. 7 students in class 2X getting higher score than the students in 2Y.
- III. The students in class 2Y have better performance in general.
- A. I only
- **B.** II only
- C. III only
- **D.** I and III only

8. [17-18 s.2 Mid-year Exam, #19]

The bar chart below shows the monthly income of a taxi driver last year. Which of the followings must be true?

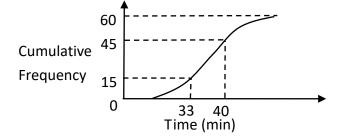


- A. The income in October was \$1000.
- **B.** The sum of the income in January and December was \$27 000.
- C. The income in December was twice as that in March.
- **D.** The income in November was \$500 more than that in May.

9. [17-18 s.2 Final Exam, #7]

The cumulative frequency curve shows the time spent on using mobile phones every day by 60

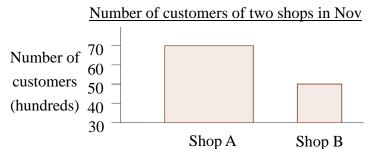
S.2 students. Find the lower quartile.



- **A.** 15 mins
- **B.** 33 mins
- **C.** 40 mins
- **D.** 45 mins

10. [18-19 s.2 Mid-year Exam, #8]

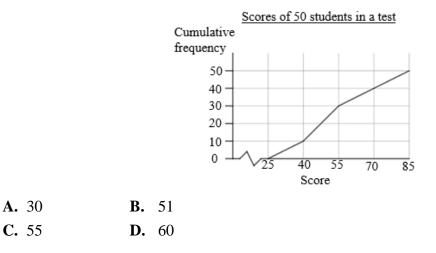
Consider the statistical diagram below. Which of the following is/are correct?



- I. 7 000 customers visited shop A in Nov.
- II. The number of customers in shop B is half of that in shop A.
- III. The number of customers in shop A is 1.96 times as that in shop B.
- A. I only
- **B.** I and II only
- C. I and III only
- **D.** II and III only

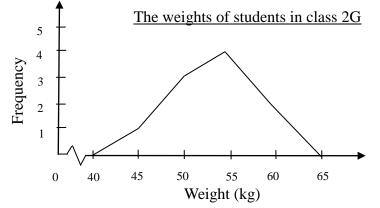
11. [18-19 s.2 Mid-year Exam, #18]

The figure shows the cumulative frequency polygon of the score of 50 students in a test. Find the 60th percentile of the scores.



12. [18-19 s.2 Final Exam, #14]

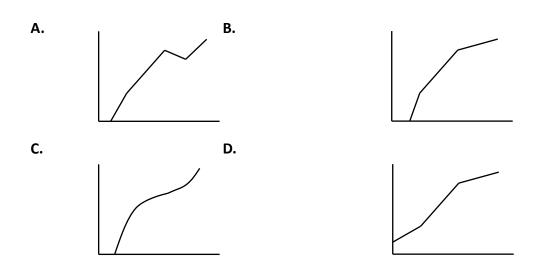
The following frequency polygon shows the weights of students in class 2G. Which of the following must be true?



- I. The least weight of the students is 45 kg.
- II. The total number of students is 11.
- III. The greatest weight of the students is 67.5 kg.
- A. I only
- **B.** I and II only
- C. I and III only
- **D.** None of the above

13. [19-20 s.2 Mid-year exam, #6]

Which of the following is a cumulative frequency polygon?



14. [19-20 s.2 Mid-year exam, #12]

The cumulative frequency table below shows the weights (in kg) of a group of teachers.

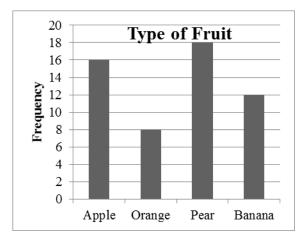
Weight less than (kg)	Cumulative frequency		
40.5	0		
45.5	2		
50.5	14		
55.5	36		
60.5	38		
65.5	49		
70.5	5x - 11		

If $\frac{2}{3}$ of the teachers' weights in the group are less than 55.5 kg, find the value of *x*.

- **A.** 4 **B.** 6.4
- **C.** 7 **D.** 13

15.[17-18 S.1 Final Exam, #10]

The statistical diagram below is the bar chart of the number of different type of fruit consumed in a month.



What type of graph can this bar chart be changed to?

- A. Pie chart
- **B.** Broken line graph
- **C.** Scattered diagram
- D. Stem-and-leaf diagram

16. [20-21 S.2 Standardized Test #3]

The following frequency distribution table and cumulative frequency table show the lifetimes (in h) of 100 light bulbs.

Lifetime (h)	1000 - 1199	1200 - 1399	1400 – 1599	1600 – 1799	1800 – 1999
Frequency	а	22	35	22	13

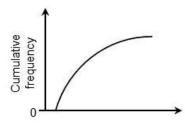
Lifetime less than (h)	999.5	1199.5	1399.5	1599.5	1799.5	1999.5
Cumulative Frequency	0	8	30	b	87	100

Find the values of *a* and *b*.

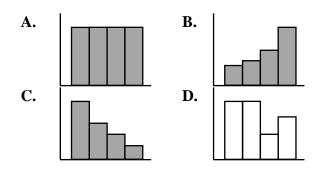
- **A.** a = 0, b = 52
- **B.** a = 0, b = 65
- C. a = 8, b = 52
- **D.** *a* = 8, *b* = 65

17. [20-21 S.2 Standardized Test #9]

The diagram below shows a cumulative frequency curve.

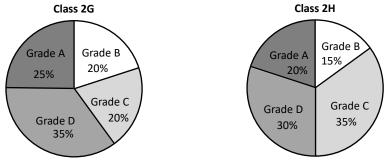


Which of the following may be the corresponding histogram?



18. [20-21 S.2 Final Exam #7]

The following pie charts show the Mathematics grades obtained by students in two classes.

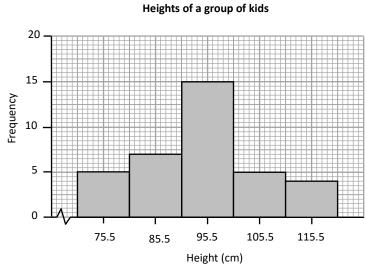


Which of the following must be true?

- I. The number of students getting Grade B in class 2G is the same as the number of students getting Grade A in class 2H.
- II. The percentage of students getting grade B in class 2G is larger than that in class 2H.
- III. The number of students getting grade A in class 2G is more than that in class 2H.
- A. I only
- **B.** II only
- C. I and III only
- **D.** I, II and III

19. [20-21 S.2 Final Exam #19]

The following histogram shows the distribution of the heights (in cm) of a group of kids.



Which of the following must be true?

- A. There are 38 kids in this group.
- **B.** More than half of the kids are of height 95.5 cm or above.
- C. The class interval of the class with lowest frequency is 110.5 cm 120.5 cm.
- **D.** The class boundaries of the class with the highest frequency are 90.5 cm and 100.5 cm.

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