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India's Number 1 Education App

## MATHS

## BOOKS - KIRAN PUBLICATION

## AVERAGE

## Type I

1. A student was asked to find the arithmetic mean of the following 12 numbers :
$3,11,7,9,15,13,8,19,17,21,14$ and $x$.

He found the mean to be 12. The value of $x$ will be :
A. 3
B. 7
C. 17
D. 31

Answer: B
( Watch Video Solution
2. The average of the marks obtained in an examination by 8 students was 51 and by 9 other students was 68. The average marks of all 17 students was:
A. 59
B. 59.5
C. 60
D. 60.5

## Answer: C

3. If the average marks of three batches of 55,

60 and 45 students respectively is 50,55 and 60 , then the average marks of all the students is
A. 54.68
B. 53.33
C. 55
D. None of these

Answer: A

## D Watch Video Solution

4. The average of 30 results is 20 and the average of other 20 results is 30 . What is the average of all the results ?
A. 24
B. 48
C. 25
D. 50

## - Watch Video Solution

5. Average of ten numbers is 7. If every number
is multiplied by 12 , what will be the average of new numbers?
A. 7
B. 19
C. 82
D. 84

## Answer: D

## - Watch Video Solution

6. Average of ten numbers is 7. If every number
is multiplied by 12 , what will be the average of new numbers?
A. Rs 410
B. Rs $4106 \frac{1}{3}$
C. Rs $4106 \frac{2}{3}$
D. $\operatorname{Rs} 418 \frac{1}{3}$

## Answer: C

## D Watch Video Solution

7. The average weight of five persons sitting in
a boat is 38 kg . The average weight of the boat and the persons sitting in the boat is 52 kg . What is the weight of the boat?
A. 228 kg
B. 122 kg
C. 232 kg

## D. 242 kg

## Answer: B

## D Watch Video Solution

8. The average of 20 numbers is calculated as
9. It is discovered later on that while calculating the average, one number, namely 85 , was misread as 45 . The correct average is:
A. 36
B. 36.5
C. 37
D. 37.5

## Answer: C

## D Watch Video Solution

9. Total weekly emoluments of the workers of a factory is Rs 1534. Average weekly emolument of a worker is Rs 118 . The number of workers in the factory is :
A. 16
B. 14
C. 13
D. 12

Answer: C

D Watch Video Solution
10. The average of $a b$ and $c$ is 20 and that of $b$,
$c$ and $d$ is 25 . If $d=30$, then the value of $a$ is:
A. 25
B. 45
C. 30
D. 15

Answer: D

## D Watch Video Solution

11. If average of 20 observation
$x_{1}, x_{2}, \ldots \ldots x_{20}$ is y . then the average of
$x_{1}-101, x_{2}-101, x_{3}-101, \ldots \ldots X_{20}-101$ is :
A. $y-20$
B. $y-101$
C. 20y
D. 101y

Answer: B
( Watch Video Solution
12. The average of $x$ numbers is $y$ and average of $y$ numbers is $x$ Then the average of all the numbers taken together is

$$
\begin{aligned}
& \text { A. } \frac{x+y}{2 x y} \\
& \text { B. } \frac{2 x y}{x+y} \\
& \text { C. } \frac{x^{2}+y^{2}}{x+y} \\
& \text { D. } \frac{x y}{x+y}
\end{aligned}
$$

Answer: B

## D Watch Video Solution

13. The average of x numbers is $y^{2}$ and the average of y numbers is $x^{2}$. Find the average of all the numbers taken together
A. $\frac{x^{3}+y^{3}}{x+y}$
B. $x y$
C. $\frac{x^{2}+y^{2}}{x+y}$
D. $x y^{2}+y x^{2}$

Answer: B

D Watch Video Solution
14. The average of $n$ numbers
$x_{1}, x_{2}, \ldots \ldots X_{n}$ is $\bar{x}$. Then the value of
$\sum_{i=1}^{n}\left(x_{1}-\bar{x}\right)$ is equal to
A. n
B. 0
C. $n \bar{x}$
D. $\bar{x}$

Answer: B
15. In a class, average height of all students is
$a \mathrm{cms}$. Among them, average height of 10
students is ' b ' cms and the average height of
the remaining students is ' c ' cms . Find the number of students in the class. (Here $a>c$ and $b>c$ )
A. $\frac{a(b-c)}{a-c}$
B. $\frac{b-c}{a-c}$
C. $\frac{b-c}{10(a-c)}$
D. $\frac{10(b-c)}{a-c}$

## Answer: D

## D Watch Video Solution

16. A library has an average number of 510 visitors on Sunday and 240 on other days. The average number of visitors per day in a month of 30 day beginning with Sunday is :
A. 285
B. 295
C. 300

## D. 290

## Answer: A

## D Watch Video Solution

17. Nine students of a class contribute a certain sum of money. Seven of them gave Rs.

50 each and the other two gave respectively Rs. 50 and Rs. 90 more than the average contribution. The average contribution of the class of 9 students is:
A. Rs 70
B. Rs 50
C. Rs 100
D. Rs 120

Answer: A

## D Watch Video Solution

18. The average monthly expenditure of a family is Rs 2,200 during first three months, Rs

2,550 during next four months and Rs 3,120
during last five months of the year. If the total
savings during the year was Rs 1,260 , what is
the average monthly income ?
A. Rs 1,260
B. Rs 1,280
C. Rs 2,805
D. Rs 2,850

Answer: C

D Watch Video Solution
19. Find the average of $1.11,0.01,0.101 .0 .001$, 0.11
A. 0.2664
B. 0.2554
C. 0.1264
D. 0.1164

Answer: A

## D Watch Video Solution

20. 4 boys and 3 girls spent Rs 120 on the average, of which boys spent Rs 150 on the average. Then the average amount spent by the girls Is:
A. Rs 80
B. Rs 60
C. Rs 90
D. Rs 100

Answer: A
21. The cost of 6 tables and 12 chairs is Rs.
7800. If the average cost of 1 table. is Rs. 750 .

Find the average cost of 1 chair.
A. Rs 250
B. Rs 275
C. Rs 150
D. Rs 175

Answer: B
22. Out of 20 boys, 6 are each of 1 m 15 cm height. 8 are of 1 m 10 cm and rest of 1 m 12 cm . The average height of all of them is
A. 1 m 12.1 cm
B. 1 m 21.1 cm
C. 1 m 21 cm
D. 1 m 12 cm

## - Watch Video Solution

23. There are two groups $A$ and $B$ of a class, consisting of 42 and 28 students respectivery.

If the average weight of group A is 25 kg and that of group B is 40 kg . Find the average weight of the whole class.
A. 69 kg
B. 31 kg
C. 70 kg

## D. 30 kg

## Answer: B

## D Watch Video Solution

24. The average monthly salary of all the employees in an industry is Rs 12,000. The average salary of male employees Is Rs 15,000 and that of female employees is Rs 8,000.

What is the ratio of male employees to female employees ?
A. $5: 2$
B. 3: 4
C. $4: 3$
D. 2:5

## Answer: C

## D Watch Video Solution

25. The mean of 9 observations is 16 . One more
observation is included and the new mean
becomes 17. The 10th observation is
A. 9
B. 16
C. 26
D. 30

Answer: C

D Watch Video Solution
26. The average of 8 numbers is 27 . If each of
the numbers is multiplied by 8 , find the average of new set of numbers.
A. 1128
B. 938
C. 316
D. 216

## Answer: D

## D Watch Video Solution

27. The average of 100 numbers is 44 . The average of these 100 numbers and 4 other
new numbers is 50 . The average of the four new numbers will be:
A. 80
B. 200
C. 176
D. 24

Answer: B

- Watch Video Solution

28. The average temperature for Monday,

Tuesday, Wednesday and Thursday was $48^{\circ}$.

The average temperature for Tuesday,
Wednesday, Thursday and Friday was $52^{\circ}$, If
the temperature on Monday was $42^{\circ}$, then the temperature on Friday was (in degrees)
A. 58
B. 56
C. 52
D. 50

Answer: A

## D Watch Video Solution

29. The arithmetic mean of the following
numbers $1,2,2,3,3,3,4,4,4,4,5,5,5,5.5,6,6$,
$6,6.6,6$ and $7,7,7,7.7,7.7$ is
A. 4
B. 5
C. 14
D. 20

Answer: B

## D Watch Video Solution

30. There are 100 students in 3 sections $A B$
and $C$ of a class. The average marks of all the 3
sections was 84 . The average of $B$ and $C$ was
87.5 and the average marks of $A$ is 70 . The number of students in A was:
A. 30
B. 35
C. 20
D. 25

## Answer: C

## - Watch Video Solution

31. The average weight of 11 persons out of 12
is 95 kg . The weight of 12th person is 33 kg
more than the average weight of all 12 persons. Find the weight of 12th persons
A. 128.75 kg
B. 128 kg
C. 131 kg
D. 97.45 kg

Answer: C

D Watch Video Solution
32. The average weight of $A B$ and $C$ Is 45 kg . If
the average weight of $A$ and $B$ be 40 kg and
that of $B$ and $C$ be 43 kg , then the weight (in kg ) of $B$ is
A. 20
B. 26
C. 31
D. 17

Answer: C
( Watch Video Solution
33. The average of some natural numbers is 15 .

If 30 is added to first number and 5 is
subtracted from the last number the average becomes 17.5 then the number of natural number Is:
A. 15
B. 30
C. 20
D. 10

## - Watch Video Solution

34. The average weight of 3 men $A, B$ and $C$ is

84 kg . Another man D joins the group and the average now become 80 kg . If another man E , whose weight is 3 kg more than that of D , replaces $A$, then average weight of $B, C, D$ and
$E$ becomes 79 kg . The weight of $A$ is.
A. 72 kg
B. 74 kg
C. 75 kg

## D. 76 kg

## Answer: C

## - Watch Video Solution

35. The average weight of 15 oarsmen in a boat
is increased by 1.6 kg when one of the crew, who weighs 42 kg is replaced by a new man.

Find the weight of the new man (in kg ).
A. 67
B. 65
C. 66
D. 43

## Answer: C

## D Watch Video Solution

36. A librarian purchased 50 storybooks for his
library. But he saw that he could get 14 more books by spending Rs. 76 more and the average price per book would be reduced by

Re. 1. The average price (in Rs.) of each book he bought, was:
A. 15
B. 10
C. 25
D. 20

Answer: B
( Watch Video Solution
37. The average of $1,3,5,7,9,11$, ........ to 25 terms is:
A. 125
B. 25
C. 625
D. 50

Answer: B

D Watch Video Solution
38. Six friends have an average height of 167 cms. A boy with height 162 cm leaves the group. Find the new average height.
A. 168 cm
B. 166 cm
C. 169 cm
D. 167 cm

## Answer: A

39. The average revenues of 7 consecutive years of a company is Rs. 75 lakhs. If the average of first 4 years is Rs. 70 lakhs and that of last 4 years is Rs. 82 lakhs, what will be the revenue for the 4th year?
A. Rs. 85 lakhs
B. Rs. 83 lakhs
C. Rs. 81 lakhs
D. Rs. 79 lakhs

## - Watch Video Solution

40. Three maths classes : $X, Y$ and $Z$, take an algebra test. The average score of class $X$ is 83 .

The average score of class Y is 76 . The average score of class $Z$ is 85 . The average score of class $X$ and $Y$ is 79 and average score of class $Y$ and $Z$ is 81 . What is the average score of classes X, Y, Z
A. 81.5
B. 81

## C. 80.5

D. 80

## Answer: A

## D Watch Video Solution

41. The mean high temperature of the first, four days of a week is $25^{\circ} \mathrm{C}$ whereas the mean of the last four days is $25.5^{\circ} \mathrm{C}$. If the mean temperature of the whole week is $25.2^{\circ} \mathrm{C}$ then the temperature on the 4th day is:
A. $25.5^{\circ} \mathrm{C}$
B. $25^{\circ} \mathrm{c}$
C. $25.2^{\circ} \mathrm{C}$
D. $25.6^{\circ} \mathrm{C}$

## Answer: D

## D Watch Video Solution

42. The average marks of 50 students in a class
is 72. The average marks of boys and girls in
that subject are 70 and 75 respectively. The number of boys in the class is:
A. 20
B. 35
C. 25
D. 30

Answer: D
( Watch Video Solution
43. The average marks obtained by a class of 60 students is 65 . The average marks of half of the students is found to be 85. The average marks of the remaining students is
A. 35
B. 45
C. 55
D. 65

Answer: B
44. The average of marks obtained by 100 candidates in a certain examination is 30 . If the average marks of passed candidates is 35 and that of the failed candidates is 10 , what is the number of candidates who passed the examination?
A. 60
B. 70
C. 80

## D. 90

## Answer: C

## D Watch Video Solution

45. The average of 100 observations was
calculated as 35 . It was found later, that one of
the observations was misread as 83 instead of 53. The correct average is:
A. 32.7
B. 34.7
C. 35.7
D. 36.7

Answer: B

## D Watch Video Solution

46. If the difference between the average of $x$, $y$ and $y, z$ is 12 , then the difference between $x$ and z is :
A. 24
B. 48
C. 12
D. 6

Answer: A

D Watch Video Solution
47. he average of the first 7 integers in a series
of 13 consecutive odd integers is 37 . What is
the average of the entire series?
A. 37
B. 39
C. 41
D. 43

## Answer: D

## D Watch Video Solution

48. The average marks of a class of 35 children is 35 . The marks of one of the students, who
got 35 , was incorrectly entered as 65 . What is
the correct average of the class?
A. 33.76
B. 34.14
C. 35.24
D. 36.5

Answer: B
( Watch Video Solution
49. The average height of 30 boys out of a class of 50 is 160 cm . If the average height of the remaining boys is 165 cm , the average height of the whole class (in cm ) is :
A. 161
B. 162
C. 163
D. 164

Answer: B
50. The average of marks of 17 students in an examination was calculated as 71 . But it was
later found that the mark of one student had been wrongly entered as 65 instead of 56 and another as 24 instead of 50 . The correct average is:
A. 70
B. 71
C. 72
D. 73

## Answer: C

## D Watch Video Solution

51. In an examination the average marks obtained by John in English, Maths, Hindi and

Drawing were 50. His average marks in Maths, Science, Social Studies and Craft were 70. If the average marks in all seven subjects is 58 , his score in maths was
A. 50
B. 52
C. 60
D. 74

## Answer: D

## D Watch Video Solution

52. The average of prime numbers between 1
and 20 is
A. 9
B. $9\left(\frac{5}{8}\right)$
C. $10\left(\frac{1}{8}\right)$
D. 8

Answer: B

## D Watch Video Solution

53. The mean of marks secured by 50 students
in division $A$ of class $X$ is 61,25 students of
division B is 57 and that of 50 students of
division $C$ is 55 . What will be the mean of marks of the students of three divisions of Class X?
A. 57.1
B. 56.4
C. 59.2
D. 57.8

Answer: D

D Watch Video Solution
54. The average weight of Shubha, Govlnda and Reshma is 65 kg . If the average weight of

Shubha and Govinda be 63 kg and that of

Govinda and Reshma be 70 kg , then the weight of Govlnda is:
A. 41 kg
B. 71 kg
C. 88 kg
D. 46 kg

Answer: B
55. The average of three numbers of which greatest is 16 is 12 . If the smallest is half of the greatest, the remaining number is:
A. 12
B. 8
C. 14
D. 10

## - Watch Video Solution

56. The average marks obtained by 180 students in an examination is 50 . If the average marks of passed students is 80 and that of the failed students is 40 , then what is
the number of students who failed the examination?
A. 90
B. 135
C. 100
D. 45

## Answer: B

## D Watch Video Solution

57. Average of 36 results is 18 . If 2 is subtracted
from each result, what will be the new average of the results?
A. 9
B. 16
C. 17
D. 17.5

Answer: B

## - Watch Video Solution

58. A group of boys has an average weight of 36 kg . One boy weighing 42 kg leaves the group and another boy weighing 30 kg joins
the group. If the average now becomes 35.7 kg ,
then how many boys are there in the group?
A. 30
B. 32
C. 40
D. 56

Answer: C

D Watch Video Solution
59. The average weight of 100 students is 32 kg . The average weight of first 49 students is

30 kg . and that of last 50 students ls 34 kg .

What is the weight (in kg.) of the 50th student?
A. 25
B. 30
C. 32
D. 33

Answer: B
( Watch Video Solution
60. What is the average of all numbers between 8 and 74 which are divisible by 7 ?
A. 40
B. 41
C. 42
D. 43

Answer: C

D Watch Video Solution
61. What is the average of all numbers between 100 and 200 which are divisible by 13

## ?

A. 147.5
B. 145.5
C. 143.5
D. 149.5

## Answer: D

62. In a class of 50 students there are 22 girls
who scored an average of 35 marks In the test.

What is the average marks of the boys if the class average is 42 marks?
A. 50
B. 52.5
C. 47.5
D. 55

## Answer: C

63. What is the average of first 7 multiples of

## $7 ?$

A. 7
B. 14
C. 21
D. 28

Answer: D

D Watch Video Solution
64. The average of 11 results is 182 . If the average of first 6 results is 199 and that of the
last 6 results is 161, then what will be the 6th result?
A. 79
B. 118.5
C. 158
D. 237

Answer: C
65. Average weight of a class of boys is 24 kg .

When a boy having weight 36 kg leaves the class and a new boy having weight 30 kg joins the class, then the average weight becomes 23.5 kg . How many boys are there in the class?
A. 12
B. 8
C. 6
D. 16

Answer: A

## - Watch Video Solution

66. The average of marks obtained by $A$ and $B$
is 15 less than that of average marks obtained
by $B$ and $C$. If the marks obtained by $C$ is 65 ,
then what is the marks obtained by A ?
A. 35
B. 50
C. 65

## D. 80

## Answer: A

## D Watch Video Solution

67. Average weight of a group of 11 students is

37 kg . When a student left the group, then average weight of the group becomes 35 kg .

What is the weight (in kg.) of the student who left?
A. 65
B. 59
C. 57
D. 70

## Answer: C

## - Watch Video Solution

68. The average weight of $L, M$ and $N$ is 93 kg . If
the average weight of $L$ and $M$ be 89 kg and
that of $M$ and $N$ be 96.5 kg , then the weight (In
A. 92
B. 86
C. 101
D. 95

Answer: A

D Watch Video Solution
69. Mahesh buys 3 shirts at an average price of

Rs. 1250 . If he buys 2 more shirts at an average
price of Rs. 1450 what will be the average price
(in Rs.) of all the 5 shirts he buys?
A. 1370
B. 1330
C. 1310
D. 1390

Answer: B
( Watch Video Solution
70. Among four bags, average weight of last
three bags Is 18 kg and the average weight of
first three bags is 19 kg . If the weight of last bag is 22 kg , then what is the weight (in kg ) of first bag?
A. 32
B. 24
C. 33
D. 25
71. The average weight of $X, Y$ and $Z$ is 74 kg . If the average weight of $X$ and $Y$ be 68 kg . and that of $Y$ and $Z$ be 78 kg ., then the weight (In kg.) of $Y$ is
A. 70
B. 68
C. 68
D. 66

Answer: B

## D Watch Video Solution

72. The average weight of a class of 50 students Is 48.6 kg . If the average weight of the 20 boys is 154 kg , then find the average weight (in kg.) of the girls in the class.
A. 40
B. 46
C. 45
D. 42

## Answer: C

## D Watch Video Solution

73. What is the average of $36,43,51,68$ and 77 ?
A. 47
B. 49
C. 55
D. 64

## Answer: C

## D Watch Video Solution

74. The average of 10 numbers is 14 . If each number is multiplied by 6 , what will be the new average?
A. 70
B. 84
C. 56
D. 92

Answer: B

## D Watch Video Solution

75. The average height of $A B$ and $C$ is 148 cm .

If the average height of $A$ and $B$ is 136 cm . and
that of $B$ and $C$ is 125 cm ., then what is the height ( $\ln \mathrm{cm}$.) of $B$ ?
A. 56
B. 78
C. 112

D. 130

Answer: B

## D Watch Video Solution

76. The average of two numbers is 10 and the product of two numbers is 96 . Find the two numbers.
A. 3,32
B. 12,8

## C. 1,96

D. 24,4

Answer: B

- Watch Video Solution

77. If the average of $31, x, 42,39,56,78,83$ and 91 is 58.5 , what is the value of $x$ ?
A. 26
B. 34
C. 58
D. 48

## Answer: D

## D Watch Video Solution

78. The average of three numbers is 58 . First number is $\frac{3}{4}$ th of the third number. If the third number is 24 more than the second number, what will be the difference between the first and second number?
A. 24
B. 6
C. 16
D. 18

## Answer: B

## - Watch Video Solution

79. The average weight of 25 candles is 40 gram. If some candles of weight 50 gram each were removed, then average weight becomes
37.5 gram. How many candles of weight 50 gram each were removed?
A. 3
B. 5
C. 8
D. 12

Answer: B
( Watch Video Solution
80. If the difference between the average of $d$
and $e$ and that of $e$ and $h$ is 19 , what will be the difference between $d$ and $h$ ?
A. 38
B. 22
C. 9
D. 19

Answer: A

D Watch Video Solution
81. The average weight of $A, B$ and $C$ is 55 kg .

The average weight of $A$ and $B$ is 52 kg and that of $B$ and $C$ Is 48 kg . The weight of $B$ is:
A. 3 kg
B. 50 kg
C. 32 kg
D. 35 kg

Answer: D

- Watch Video Solution

82. The average marks of three groups of 50 ,

56 and 44 students are respectively 55,52 and 40.

What will be the average marks of all students?
A. 49.48
B. 49.84
C. 50.48
D. 49

Answer: A

## - Watch Video Solution

83. In a family there are two grand parents, four parents and six grand-children. The average age of grand-parents is 70 years, that of parents is 40 years and that of grand children is 12 years. What is the average age of the family?
A. 35 years
B. 32 years
C. 30 years
D. 31 years

## Answer: D

## D Watch Video Solution

84. In a class of 50 students, $40 \%$ are girls. The average weight of the boys is 62 kg and that of the girls is 58 kg . What is the average weight
(in kg ) of the whole class?
50 छात्रों की एक कक्षा में $40 \%$ लड़कियाँ हैं। लड़कों का
औसत वज़न 62 किलो ग्राम तथा लड़कियों का औसत वज़न

58 किलो ग्राम है | पूरी कक्षा का औसत वज़न ( किलो ग्राम में ) क्या है ?
A. 60.4
B. 60.2
C. 60.8
D. 60.6

Answer: A

D Watch Video Solution

1. The average of 7 consecutive numbers is 20 .

The largest of these numbers is:
A. 24
B. 23
C. 22
D. 20

Answer: B

D Watch Video Solution

## 2. The average of first nine prime numbers is:

A. 9
B. 11
C. $11\left(\frac{2}{9}\right)$
D. $11\left(\frac{1}{9}\right)$

## Answer: D

3. The average of 5 consecutive natural numbers is $m$. If the next three natural numbers are also included, how much more than mwill the average of these 8 numbers be?
A. 2
B. 1
C. 1.4
D. 1.5

## Answer: D

4. What is the average of the first six (positive)

## odd numbers each of which is divisible by 7 ?

A. 42
B. 43
C. 47
D. 49

Answer: A

- Watch Video Solution


## 5. The average of odd numbers upto 100 is:

A. 50.5
B. 50
C. 49.5
D. 49

Answer: B
( Watch Video Solution
6. The sum of squares of first ten natural numbers is:
A. 35.5
B. 36
C. 37.5
D. 38.5

Answer: D

D Watch Video Solution
7. If the average of eight consecutive even numbers be 93 , then the greatest number among them is:
A. 100
B. 86
C. 102
D. 98

Answer: A
8. The average of three consecutive odd numbers is 12 more than one third of the first of these numbers. What is the last of the three numbers?
A. 15
B. 17
C. 19
D. Data inadequate
9. The average of nine consecutive odd numbers is 53 . The least odd number is:
A. 22
B. 27
C. 35
D. 45

Answer: D

- Watch Video Solution

10. The average of the first nine integral multiples of 3 is:
A. 21
B. 12
C. 15
D. 18

Answer: C

D Watch Video Solution
11. The average of 6 consecutive natural numbers is K . If the next two natural numbers
are also included, how much more than K will the average of these 8 numbers be?
A. 1.3
B. 1
C. 2
D. 1.8

Answer: B
12. a,b,c,d,e,f,g are consecutive even numbers. J, $\mathrm{k}, \mathrm{I}, \mathrm{m}, \mathrm{n}$ are consecutive odd numbers. The average of all the numbers is:

$$
\begin{aligned}
& \text { A. } 3\left(\frac{a+n}{2}\right) \\
& \text { B. } \frac{l+d}{2} \\
& \text { C. } \frac{a+b+m+n}{4} \\
& \text { D. } \frac{j+c+n+g}{4}
\end{aligned}
$$

## Answer: B

13. If the average of 6 consecutive even numbers is 25 , the difference between the largest and the smallest number is:
A. 8
B. 10
C. 12
D. 14

Answer: B
14. If the average of 5 consecutive number starting with $m$ is $n$. Find the average of 6 consecutive number starting with $m+2$

$$
\begin{aligned}
& \text { A. } \frac{2 n+5}{2} \\
& \text { B. }(n+2) \\
& \text { C. }(n+3) \\
& \text { D. } \frac{2 n+9}{2}
\end{aligned}
$$

15. Eight consecutive numbers are given. If the average of the two numbers that appear in the middle is 6 , then the sum of the eight given numbers is:
A. 54
B. 664
C. 36
D. 48

## Answer: D

## D Watch Video Solution

16. The average of four consecutive even numbers is 15 . The 2 nd highest number Is:
A. 12
B. 18
C. 14
D. 16

## Answer: D

## D Watch Video Solution

17. The average of five consecutive positive
integers is $n$. If the next two integers are also
included, the average of all these integers will:
A. increase by 1.5
B. increase by 1
C. remain the same
D. increase by 2

Answer: B

## D Watch Video Solution

18. The average of nine consecutive numbers is
n. If the next two numbers are also included
the new average will
A. increase by 2
B. remain the same
C. increase by 1.5
D. increase by 1

## Answer: D

## D Watch Video Solution

19. If $a, b, c, d, e$ are five consecutive odd numbers, their average is:
A. $5(a+4)$
B. $\frac{a b c d e}{5}$
C. $5(a+b+c+d+e)$
D. $a+4$

## Answer: D

## D Watch Video Solution

20. The average of all the odd integers between 2 and 22 is:
A. 14
B. 12
C. 13
D. 11

Answer: B

## - Watch Video Solution

21. The sum of three consecutive even numbers is 28 more than the average of these three numbers. Then the smallest of these three numbers is
A. 6
B. 12
C. 14

## D. 16

## Answer: B

## D Watch Video Solution

22. The average of 25 consecutive odd integers
is 55 . The highest of these integers Is
A. 79
B. 105
C. 1555

## D. 109

## Answer: A

## D Watch Video Solution

23. What is the average of the squares of the
first 19 natural numbers?
A. 124
B. 127.5
C. 130
D. 133.5

## Answer: C

## D Watch Video Solution

24. What Is the average of first 29 even numbers?
A. 30
B. 31
C. 32
D. 33

## Answer: A

## D Watch Video Solution

25. The average of five consecutive odd numbers is 27 . What is the product of the first and the last number?
A. 621
B. 667
C. 713
D. 725

## Answer: C

## D Watch Video Solution

26. The average of three consecutive even numbers is $A$. If next five even numbers are added, what is the average of these eight numbers?
A. $A+3$
B. $A+4$
C. $A+5$
D. $A+7$

## Answer: C

## D Watch Video Solution

27. The average of four consecutive odd numbers is 40. What is the largest number?
A. 42
B. 45
C. 43
D. 44

## Answer: C

## D Watch Video Solution

28. The average of 5 consecutive numbers is $A$

If the next 3 numbers are also taken, then
what will be the new average?
A. $A+1$
B. $A+1.5$
C. $A+2$
D. $A+2.5$

Answer: B

D Watch Video Solution
29. The average of three consecutive odd numbers is 52 more than $\frac{1}{3} r d$ of the largest of
these numbers. What is the smallest of these

## numbers ?

A. 79
B. 75
C. 81
D. 77

Answer: D
( Watch Video Solution
30. The average of 41 consecutive odd numbers is 49 . What is the largest number.
A. 89
B. 91
C. 93
D. 95

Answer: A

D Watch Video Solution
31. What is the average of the cubes of the first 13 natural numbers?
A. 196
B. 364
C. 485
D. 637

Answer: D

D Watch Video Solution
32. What is the average of first 17 odd numbers?
A. 16
B. 17
C. 18
D. 19

Answer: B

D Watch Video Solution
33. The average of four consecutive even numbers is 51 . What is the third number?
A. 46
B. 52
C. 54
D. 56

Answer: B

- Watch Video Solution

34. Average of 7 consecutive odd numbers is
35. If the previous and next odd number to
these 7 odd numbers are also included, then
what will be the new average?
A. 33
B. 31
C. 35
D. 29

Answer: B
35. What is the average of squares of first 10 natural numbers?
A. 55.5
B. 45.6
C. 38.5
D. 40.5

Answer: C

- Watch Video Solution

36. The average of seven consecutive odd numbers is A. If next four and previous three odd numbers to these seven odd numbers are also included, then what is the new average of these 14 consecutive odd numbers?
A. $A+3$
B. $A+4$
C. A+2
D. $A+1$

## Answer: D

## - Watch Video Solution

37. The average of 15 numbers is 20 and the average of first five numbers is 18 . What is the average of the remaining numbers?
A. 21
B. 25
C. 28
D. 30

## D Watch Video Solution

38. The average of 12 numbers is 6 . If a number 10 is removed, what will be the new average?
A. 5.63
B. 5.25
C. 4.75
D. 6.23

## D Watch Video Solution

39. The average of 15 numbers is 4 . If a number 8 is removed, what will be the new average?
A. 4
B. 3.71
C. 3.53
D. 3.25

Answer: B

## - Watch Video Solution

40. What is the average of first 50 natural numbers?
A. 12.25
B. 21.25
C. 25
D. 25.5

## Answer: D

## D Watch Video Solution

41. Average of all even numbers between 222
and 250 is
A. 234
B. 232
C. 236
D. 230

## Answer: C

## D Watch Video Solution

42. The average of 8 consecutive 8 integers is 23 $\frac{23}{2}$. What is the average of first three integers?
A. 9
B. $\frac{19}{2}$
C. 8
D. 10

Answer: A

## D Watch Video Solution

43. Find the average of all prime numbers between 20 and 50 .
A. 35.857
B. 35.657
C. 34.857
D. 36.657

Answer: A

## D Watch Video Solution

44. The average of 6 consecutive integers is $\frac{15}{2}$. What is the average of last three integers?
A. 8
B. 9
C. $\frac{17}{2}$
D. 7

Answer: B

## D Watch Video Solution

45. What is the average of first 39 even numbers?
A. 39
B. 40
C. 20
D. 68

Answer: B

## D Watch Video Solution

46. Of the three numbers whose average is 26 ,
the first is $\frac{2}{11}$ times the sum of other two. The first number is:
A. 16
B. 13
C. 11
D. 12

## Answer: D

## D Watch Video Solution

47. The average of all odd numbers from 113 to

159 is
A. 135
B. 134
C. 133
D. 136

## Answer: D

## D Watch Video Solution

48. What is the average of all the one digit and two digit natural numbers?
A. 25
B. 40
C. 50
D. 99

## Answer: C

## - Watch Video Solution

49. Find the average of all prime numbers from 1 to 50.
A. 21.867
B. 22.857
C. 23.887
D. 24.867

Answer: A

## - Watch Video Solution

50. What will be the average of all the prime numbers before $19 ?$
A. 8.28
B. 11.5
C. 5.34
D. 9.63

## D Watch Video Solution

51. Find the average of first 20 multiples of 9.
A. 94.8
B. 94.7
C. 4.6
D. 94.5

## Type lif

1. The average of 9 numbers is 30 . The average
of first 5 numbers is 25 and that of the last 3
numbers is 35 . What is the 6th number?
A. 20
B. 30
C. 40

## D. 50

## Answer: C

## D Watch Video Solution

2. The average of 15 numbers is 7. If the average of the first 8 numbers be 6.5 and the average of last 8 numbers be 9.5, then the middle number is:
A. 20
B. 21
C. 23
D. 18

## Answer: C

## D Watch Video Solution

3. The average of 8 numbers is 20 . The average of first tow numbers is $15 \frac{1}{2}$ and that of the next three is $21 \frac{1}{3}$. If the sixth number be less
that the seventh and eight numbers by 4 and 7 respectively, then the eighth number is :
A. 18
B. 22
C. 25
D. 27

Answer: C
( Watch Video Solution
4. The average of 20 numbers is 12 . The average of the first 12 numbers is 11 and that of the next 7 numbers is 10 . The last number is:
A. 40
B. 38
C. 48
D. 50

Answer: B
5. Average of n numbers is a . The first number is Increased by 2 , second one is increased by 4, the third one is Increased by 8 and so on. The average of the new numbers is:

$$
\begin{aligned}
& \text { A. } a+\frac{2^{n-1}-1}{2} \\
& \text { B. } a+\frac{2\left(2^{n}-1\right)}{n} \\
& \text { C. } a+\frac{2^{n-1}}{n} \\
& \text { D. } a+\frac{2^{n}-1}{n}
\end{aligned}
$$

Answer: B

## D Watch Video Solution

6. The average temperature of the first 4 days
of a week was $37^{\circ} \mathrm{C}$ and that of the last 4 days
of the week was $41^{\circ} \mathrm{C}$. If the average temperature of the whole week was $39^{\circ} \mathrm{C}$, the temperature of the fourth day was:
A. $38^{\circ} C$
B. $38.5^{\circ} \mathrm{C}$
C. $39^{\circ} C$

## D. $40^{\circ} \mathrm{C}$

## Answer: C

## - Watch Video Solution

7. In a certain year, the average monthly income of a person was Rs 3,400 . For the first eight months of the year, his average monthly income was Rs 3,160 and for the last five
months, it was Rs 4,120. His Income in the eighth month of the year was
A. Rs 3,160
B. Rs 5,080
C. Rs 15,520
D. Rs 5,520

Answer: B
( Watch Video Solution
8. The average of 8 numbers is 21 . If each of
the numbers is mulitl-plied by 8 , the average of the new set of numbers is :
A. 21
B. 29
C. 8
D. 168

Answer: D

D Watch Video Solution
9. The average of 11 results is 50 . If the average of the first six results is 52 and that of the last six is 49 , the sixth result is-

11 परिणामों का ओसत 50 है। यदि उनमें पहले 6 परिणामों का औसत 52 हो और अंतिम 6 का 49 हो, तो छठा परिणाम कितना होगा?
A. 48
B. 50
C. 52
D. 56

## Answer: D

## - Watch Video Solution

10. The average of eight successive numbers is
6.5. The average of the smallest and the greatest numbers among them will be:
A. 4
B. 6.5
C. 7.5
D. 9

Answer: B

## D Watch Video Solution

11. The average of three numbers is 135 . The
largest number is 195 and the difference
between the other two is 20 . The smallest number is:
A. 65
B. 95
C. 105

## Answer: B

## D Watch Video Solution

12. The average of two numbers is 8 and the average of other three numbers is 3 . The average of the five numbers is:
A. 2
B. 3
C. 5
D. 6

## Answer: C

## - Watch Video Solution

13. Out of four numbers, the average of the
first three is 15 and that of the last three is 16.

If the last number is 19 , the first is
A. 19
B. 15
C. 16
D. 18

## Answer: C

## D Watch Video Solution

14. Three numbers are such that the average of first two numbers is 2 , the average of the
last two numbers is 3 and the average of the
first and the last numbers is 4 , then the average of three numbers is equal to:
A. 2
B. 3.5
C. 3
D. 2.5

Answer: C
( Watch Video Solution
15. The average of the largest and smallest 3
digit numbers formed by 0,2 and 4 would be
A. 312
B. 213
C. 222
D. 303

Answer: A
( Watch Video Solution
16. The average of six numbers is 3.95 . The average of two of them is 3.4 , while the average of the other two is 3.85 . The average of the remaining two numbers is:
A. 4.6
B. 4.5
C. 4.8
D. 4.7

## Answer: A

17. Out of four numbers the average of the first three is 16 and that of the last three is 15 .

If the last number is 20 then the first number is:
A. 23
B. 25
C. 28
D. 21

## - Watch Video Solution

18. The average of 16 numbers is 48 . The average of the first 7 numbers is 45 and the average of the next 6 numbers is 52 . If the 14 th number is 11 less than the 15 th number and is

5 more than the 16th number, then the average of the 15th and 16th number is:

16 संख्याओं का औसत 48 है | पहली 7 संख्याओं का औसत 45 तथा अगली 6 संख्याओं का औसत 52 है | यदि 14वीं संख्या 15वीं संख्या से 11 कम तथा 16वीं संख्या से 5 अधिक है, तो 15 वीं एवं 16 वीं संख्या का औसत क्या होगा ?
A. 47.5
B. 48.5
C. 49
D. 48

## Answer: D

## D Watch Video Solution

19. The average of 22 numbers is 52. The average of the first 8 numbers is 48 and the average of next 11 numbers is 54 . The 20th
number is 7 less than the 21st number and 21st number is 4 more than 22 nd number.

What is the average of the 20th and 22nd numbers?

22 संख्याओं का औसत 52 है | पहली 8 संख्याओं का
औसत 48 तथा अगली 11 संख्याओं का औसत 54 है ।
20वीं संख्या 21वीं संख्या से 7 कम है तथा 21वीं संख्या
22वीं संख्या से 4 अधिक है 20 वीं संख्या और 22 वीं संख्या
का औसत ज्ञात करें ।
A. 52
B. 52.5
C. 53

## Answer: D

## D Watch Video Solution

20. The average of twelve numbers is 42 . The average of the last five numbers is 40 and that of the first four numbers is 44. The 6th number is 6 less than the fifth and 5 less than
the 7 th number. The average of the 5 th and the 7th numbers is:

बारह संख्याओं का औसत 42 है | अंतिम पांच संख्याओं का
औसत 40 तथा पहली चार संख्याओं का औसत 44 है।
छठी संख्या पाँचवीं से 6 कम है तथा 7 वीं संख्या से 5 कम है
| 5 वीं और 7 वीं संख्या का औसत है :
A. 44
B. 44.5
C. 43
D. 43.5

Answer: B
21. The average of thirteen numbers is 80 . The average of the first five numbers is 74.5 and that of the next five numbers is 82.5 . The 11th number is 6 more than the 12th number and
the 12th number is 6 less than the 13th number. What is the average of the 11th and the 13th numbers?

तेरह संख्याओं का औसत 80 है | पहली पांच संख्याओं का औसत 74.5 और अगली पांच संख्याओं का औसत 82.5 है |

11वीं संख्या 12वीं संख्या से 6 अधिक है तथा 12वीं संख्या

13 वीं संख्या से 6 कम है। 11 वीं तथा 13वीं संख्याओं का औसत ज्ञात करें |
A. 87
B. 86
C. 86.5
D. 87.5

Answer: A
(D) Watch Video Solution

1. Of the three numbers whose average is 60 , the first is one fourth of the sum of the others.

The first number is :
A. 30
B. 36
C. 42
D. 45

Answer: B
2. Of the three numbers, second is twice the first and also thrice the third. If the average of the three numbers is 44 , the largest number Is
A. 24
B. 72
C. 36
D. 108
3. The average of first three numbers is thrice
the fourth number. If the average of all the four numbers is 5, then find the fourth number.
A. 4.5
B. 5
C. 2
D. 4

## Answer: C

## D Watch Video Solution

4. Of the three numbers, the first number is twice of the second and the second is thrice of the third number. If the average of these 3 numbers is 20 , then the sum of the largest and smallest numbers is:
A. 24
B. 42
C. 54
D. 60

Answer: B

## - Watch Video Solution

5. If the arithmetic mean of $3 a$ and $4 b$ is greater than 50 , and $a$ is twice $b$, then the smallest possible Integer value of $a$ is
A. 20
B. 18
C. 21
D. 19

## Answer: C

## D Watch Video Solution

6. Of three numbers, the first is 4 times the second and 3 times the third. If the average of
all the three numbers is 95 , what is the third number ?
A. 76
B. 60
C. 130
D. 57

Answer: B

- Watch Video Solution

7. Among three numbers, the first is twice the second and thrice the third. If the average of
the three numbers is 49.5 , then the difference between the first and the third number is:
A. 54
B. 28
C. 39.5
D. 41.5

Answer: A
( Watch Video Solution
8. Of the three numbers, the first is twice the second, and the second is twice the third. The average of the reciprocal of the numbers is $\frac{7}{12}$. The numbers are :
A. 20,10,5
B. 4,2,1
C. $36,18,9$
D. $16,8,4$

Answer: B
9. The average of 11 numbers is 7. If every number is doubled, what will be the new average of the numbers?
A. 3.5
B. 7
C. 10.5
D. 14

Answer: D
10. Of the three numbers whose average is 40 ,
the first is $\frac{1}{3}$ rd of o the sum of other two. What is the first number?
A. 20
B. 50
C. 25
D. 30

## - Watch Video Solution

## Type V

1. The average of marks of 14 student was
calculated as 71. But It was later found that
the marks of one student had been wrongly entered as 42 instead of 56 and of another as

74 instead of 32 . The correct average is:
A. 67
B. 68
C. 69
D. 71

## Answer: C

## - Watch Video Solution

2. The average marks of 72 students is shown as 69. It Includes a wrong entry of 45 marks instead of 54 marks. The correct average is:
A. 68.875 marks
B. 69.125 marks
C. 68.625 marks
D. 69.375 marks

## Answer: B

## D Watch Video Solution

3. The average of 50 numbers is 38 . If the two numbers 45 and 55 are not considered, what will be the average of remaining numbers?
A. 37.5
B. 37.9
C. 36.5
D. 37

Answer: A

## - Watch Video Solution

4. The average weight of 15 students in a class increases by 1.5 kg when one of the students weighing 40 kg is replaced by a new student.

What is the weight (in kg ) of the new student

## ?

A. 64.5 kg
B. 56 kg
C. 60 kg
D. 62.5 kg

Answer: D
( Watch Video Solution
5. The average of six numbers is 20 . If one number is removed, the average becomes 15 . What is the number removed?
A. 5
B. 35
C. 112
D. 45

Answer: D

D Watch Video Solution
6. The average of 25 observations is 13 . It was
later found that an observation 73 was wrongly entered as 48 . The new average is:
A. 12.6
B. 14
C. 15
D. 13.8

Answer: B

D Watch Video Solution
7. While finding the average of 10 given numbers, a student, by mistake, wrote 64 in place of a number 46 and got his correct average 50. The correct average of the given numbers is:
A. 48.2
B. 48.3
C. 49.1
D. 49.3
8. A boy found that the average of 20 numbers
is 35 when he writes a number '61' instead of
' 16 '. The correct average of 20 numbers is:
A. 32.75
B. 36.25
C. 34.75
D. 34.25

## - Watch Video Solution

9. A student finds the average of ten 2-digit numbers. While copying numbers, by mistake, he writes one number with its digits interchanged. As a result his answer is 1.8 less
than the correct answer. The difference of the digits of the number, in which he made mistake, is :
A. 2
B. 3
C. 4
D. 6

## Answer: A

## D Watch Video Solution

10. The average marks obtained by a student
in 6 subjects is 88 . On subsequent verification
it was found that the marks obtained by him
in a subject was wrongly copied as 86 Instead
of 68. The correct average of the marks obtained by him is:
A. 87
B. 85
C. 84
D. 86

Answer: B
( Watch Video Solution
11. Average marks of 100 students of a class is
58. Later it was found that 86 was mistakenly
written as 68. Find the actual average.
A. 58.18
B. 57.82
C. 58.81
D. 57.28

Answer: A

- Watch Video Solution

12. Average price of f 100 articles is 46 . Later it
was found that 16 was read as 61 and 43 was
read as 34 and the articles were 90 instead of
13. Find the actual average.
A. 50
B. 50.7
C. 52
D. 52.7

Answer: B
13. In an exam, the average marks obtained by
the students was found to be 60. After omission of computational errors, the average marks of some 100 candidates had to be changed from 60 to 30 and the average with respect to all the examinees came down to 45 marks. The total number of candidates who took the exam, was
A. 200
B. 210
C. 240
D. 180

Answer: A

## D Watch Video Solution

14. The average marks of 40 students in an examination was 25 . It was later found that the marks of one student had been wrongly entered as 73 instead of 37 . What is the value of correct average?
A. 24.3
B. 24.1
C. 24.5
D. 24.7

Answer: B

## - Watch Video Solution

15. The average weight of 20 students in a class is increased by 0.75 kg when one of the
students weighing 30 kg is replaced by a new
student. Weight of the new student (in kg ) is :
A. 35
B. 40
C. 45
D. 50

Answer: C
( Watch Video Solution
16. There are 50 students in a class. One of
them weighing 50 kg goes away and a new student joins. By this the average weight of the class Increases by $\frac{1}{2} \mathrm{~kg}$. The weight of the new student is:
A. 70 kg
B. 72 kg
C. 75 kg
D. 76 kg
17. The average weight of 12 crewmen in a boat is increased by $\frac{1}{3} \mathrm{~kg}$, when one of the crewmen whose weight is 55 kg is replaced by a new man. What is the weight of that new man?
A. 58 kg
B. 60 kg
C. 57 kg

## D. 59 kg

## Answer: D

## D Watch Video Solution

18. The average marks obtained by 22
candidates in an examination are 45. The average marks of the first 10 candidates are 55 and those of the last eleven are 40 . The number of marks obtained by the eleventh candidate is:
A. 45
B. 0
C. 50
D. 47.5

Answer: B

## D Watch Video Solution

19. The mean of 20 items is 55 . If two items 45 and 30 are removed, the new mean of the remaining items is:
A. 65.1
B. 65.3
C. 56.9
D. 56

Answer: C

## D Watch Video Solution

20. The average marks obtained by 40 students of a class is 86 . If the 5 highest marks
are removed, the average reduces by one
mark. The average marks of the top 5 students
is:
A. 92
B. 96
C. 93
D. 97

Answer: C
( Watch Video Solution
21. The average marks of 50 students in an examination was 65. It was later found that the marks of one student had been wrongly entered as 83 instead of 38 . The correct average is?
A. 63.9
B. 64.5
C. 64.7
D. 64.1
22. The average of 50 results was calculated as

30 but later it was found that while calculating, 73 was taken as 33 by mistake, then what will be the correct average?
A. 29.2
B. 30.8
C. 31.6
D. 34

Answer: B

## D Watch Video Solution

23. The average of 45 results was calculated as

27 but later it was found that while calculating

39 was taken as 93 by mistake, then what will be the correct average?
A. 25.8
B. 26.8
C. 27.2
D. 28.2

## Answer: A

## D Watch Video Solution

24. In class IX. the average marks of 6 students

In science were 48. After the declaration of result, it was observed that the number 45 of a student was misread as 54 . The correct average is:
A. 76.5
B. 46.4
C. 46.5
D. 64.9

Answer: C

D Watch Video Solution

## Type Vi

1. The average of five numbers is 27 . If one number is excluded, the average becomes 25 .

The excluded number is:
A. 25
B. 27
C. 30
D. 35

## Answer: D

2. The average of marks of 28 students in

Mathematics was 50, 8 students left the school, then this average increased by 5 . What is the average of marks obtained by the students who left the school?
A. 50.5
B. 37.5
C. 42.5
D. 45

## - Watch Video Solution

3. The average weight of 12 articles is 18 kg .

Addition of another new article reduces the average weight by 500 g . What is the weight of the new article?

12 वस्तुओं का औसत वज़न 18 किलो ग्राम है। एक अन्य नयी वस्तु को शामिल करने से औसत वज़न 500 ग्राम कम हो जाता है | नयी वस्तु का वजन ज्ञात करें |
A. 1.50 kg
B. 1.10 kg

## C. 1.15 kg

## D. 1.01 kg

## Answer: C

## D Watch Video Solution

4. If the mean of 4 observations is 20 , when a constant ' C ' is added to each observation, the mean becomes 22. The value of C is :
A. 6
B. -2
C. 2
D. 4

## Answer:

## D Watch Video Solution

5. There are 50 students in a class. Their average weight is 45 kg . When one student
leaves the class the average weight reduces by

100 g . What is the weight of the student who left the class ?
A. 45 kg
B. 47.9 kg
C. 49.9 kg
D. 50.1 kg

Answer: C
( Watch Video Solution
6. Average weight of 25 students of a class is

50 kg . If the weight of the class teacher is included, the average is increased by 1 kg . The weight of the teacher is:
A. 76 kg
B. 77 kg
C. 74 kg
D. 75 kg

Answer: A
7. There are 35 students in a hostel. If the number of students increases by 7, then the expenses of the mess increased by Rs. 42 per day while the average expenditure per head diminishes by Re. 1. Find the original expenditure of the mess.
A. Rs 400
B. Rs 432
C. Rs 442

## D. Rs 420

## Answer: D

## D Watch Video Solution

8. The average weight of 40 children of a class
is 36.2 kg . When three more children with
weight $42.3 \mathrm{~kg}, 39.7 \mathrm{~kg}$ and 39.5 kg join the
class, the average weight of the 43 children In
the class Is:
A. 39.2 kg
B. 36.5 kg
C. 38.35 kg
D. 37.3 kg

Answer: B

## D Watch Video Solution

9. In a class, the average score of girls in an examination is 73 and that of boys is 71 . The average score for the whole class Is 71.8. Find the percentage of girls.
A. 0.4
B. 0.5
C. 0.55
D. 0.6

Answer: A

D Watch Video Solution
10. The average of five numbers is 7 . When
three new numbers are included, the average
of the eight numbers becomes 8.5. The average of the three new numbers is:
A. 9
B. 10.5
C. 11
D. 11.5

Answer: C

## D Watch Video Solution

11. The average of six numbers is 32 . If each of
the first three numbers is increased by 2 and each of the remaining three numbers is decreased by 4, then find the new average.
A. 35
B. 34
C. 31
D. 30

## Answer: C

12. A student finds the average of 10,2 - digit numbers. If the digits of one of the numbers is interchanged, the average Increases by 3.6.

The difference between the digits of the 2digit numbers is:
A. 4
B. 3
C. 2
D. 5

Answer: A

## D Watch Video Solution

13. The average of 30 numbers is 106 . Later it
was found that two numbers 82 and 136 were
wrongly taken as 92 and 186 for calculation of average. What is the correct average?
A. 104
B. 103.5
C. 102.5

## Answer: A

## D Watch Video Solution

## Type Vii

1. A cricketer whose bowling average is 24.85 ,
runs per wicket, takes 5 wickets for 52 runs
and thereby decreases his average by 0.85 . The
number of wickets taken by him till the last match was:
A. 64
B. 72
C. 80
D. 96

Answer: C
( Watch Video Solution
2. The average of runs of a cricket player of 10
innings was 32 . How many runs must he make
in his next Innings so as to increase his
average of runs by 4 ?
A. 76
B. 70
C. 4
D. 2

Answer: A
3. The averages of runs scored by a cricket
player $\ln 11$ innings is 63 and the average of his
first six innings Is 60 and the average of last
six Innings is 65. Find the runs scored by him
in the sixth Innings.
A. 60
B. 54
C. 67
D. 57

## Answer: D

## - Watch Video Solution

4. A cricketer had a certain average of runs for
his 64 innings. In his 65th innings, he Is bowled out for no score on his part. This brings down his average by 2 runs. His new average of runs is:
A. 130
B. 128
C. 70
D. 68

Answer: B

## D Watch Video Solution

5. A cricketer has a certain average of runs for
his 8 innings. In the ninth Innings, he scores
100 runs, thereby Increases his average by 9
runs. His new average of runs Is:
A. 20
B. 24
C. 28
D. 32

## Answer: C

## - Watch Video Solution

6. A cricket batsman had a certain average of runs for his 11 innings. In the 12th innings, he made a score of 90 runs and thereby his
average of runs was decreased by 5. His average of runs after 12th innings is:
A. 155
B. 150
C. 145
D. 140

Answer: C
( Watch Video Solution

## 7. Average runs scored by 11 players of a cricket

 team is 23 . If the first player scored 113 runs.Find the average runs of the remaining players.
A. 8 runs
B. 12 runs
C. 14 runs
D. 27 runs

## Answer: C

8. If the average of 64 innings of a batsman is
9. If highest and lowest innings are excluded then the average of remaining 62 innings is 60. If the difference between highest and lowest innings is 180 runs. Find his highest and lowest score.
A. 180 runs
B. 209 runs
C. 212 runs

## D. 214 runs

## Answer: D

## D Watch Video Solution

9. The average of runs scored by a cricketer in
his 99 innings is 99 . How many runs will he have to score in his 100th Innings so that his average of runs in 100 innings may be $100 ?$
A. 100
B. 99
C. 199
D. 101

## Answer: C

## - Watch Video Solution

10. A cricketer has a mean score of 60 runs in

10 innings. Find out how many runs are to be scored in the eleventh innings to raise the mean score to 62?
A. 83
B. 82
C. 80
D. 81

Answer: B

D Watch Video Solution
11. In a 20 over match, the required run rate to
win is 7.2 . If the run rate is 6 at the end of the

15th over, the required run rate to win the match is:
A. 1.2
B. 13.2
C. 10.8
D. 12

Answer: C

- Watch Video Solution

12. In the first 10 overs of a cricket game, the run rate was only 3.2. The run rate in the remaining 40 overs to reach the target of 282 runs is
A. 6.4
B. 6.3
C. 6.25
D. 6.5

Answer: C
13. The batting average for 30 Inings of a cricket player is 40 runs. His highest score exceeds his lowest score by 100 runs. If these
two innings are not included, the average of the remaining 28 innings is 38 runs. The lowest score of the player Is :
A. 15
B. 18
C. 20

## D. 12

## Answer: B

## D Watch Video Solution

14. Sachln Tendulkar has a certain average for

11 innings. In the 12th innings he scores 120
runs and thereby Increases his average by 5
runs. His new average Is:
A. 60
B. 62
C. 65
D. 66

## Answer: C

## D Watch Video Solution

15. A cricketer, whose bowling average was 12.4
runs/wicket takes 5 wickets for 22 runs in a match, thereby decreases his average by 0.4.

The number of wickets, taken by him before this match was :
A. 78
B. 87
C. 95
D. 105

Answer: C
( Watch Video Solution
16. A batsman makes a score of 87 runs In the

17th Innings and thus Increased his average by
3. Find his average after 17th innings.
A. 39
B. 87
C. 90
D. 84

Answer: A

D Watch Video Solution
17. In the first 30 overs of a cricket match, the run rate was 5.2 runs/over. What is the required run rate $\ln$ the remaining 20 overs to reach the target of 280 runs ?
A. 6.8
B. 7.4
C. 6.2
D. 5.6

Answer: C
18. In a match, average of runs scored by five
players Is 49. If the runs scored by four players
are $75,30,62$ and 21 respectively, then how many runs did the fifth player score?
A. 43
B. 49
C. 57
D. 89

## Answer: C

## D Watch Video Solution

19. The average runs scored by a batsman In 7
matches Is 53 and In other 9 matches the average Is 33 . What is the average runs scored by the batsman In 16 matches?
A. 41.75
B. 44.25
C. 47

## D. 49.175

## Answer: A

## D Watch Video Solution

20. A batsman makes a score of 81 runs in the

16th match and thus Increases his average
runs per match by 3 . What Is his average after the 16th match?
A. 35
B. 34
C. 33
D. 36

## Answer: D

## - Watch Video Solution

21. A batsman scores 98 runs In the 17th match
of his career. His average runs per match
increased by 2.5. What is his average before the 17th match?
A. 58
B. 60.5
C. 63
D. 55.5

## Answer: D

## D Watch Video Solution

22. In a one day match of 50 overs in an innings the Team A had a run rate of 6.1 runs per over. Team $B$ is playing and 10 overs are
left and the required run rate to tie the match
is 6.5 per over. What is Team B's score now?
A. 235
B. 230
C. 240
D. 225

Answer: C

D Watch Video Solution

1. The average age of 14 girls and their teacher's age is 15 years. If the teacher's age is excluded, the average reduces by 1 . What is the teacher's age?
A. 35 years
B. 32 years
C. 30 years
D. 29 years
2. The average age of four brothers is 12 years.

If the age of their mother is also Included, the average is increased by 5 years. The age of the mother (in years) is :
A. 37 years
B. 43 years
C. 48 years
D. 53 years

## Answer: A

## D Watch Video Solution

3. The average age of 8 persons is increased by

2 years, when one of them, whose age is 24
years Is replaced by a new person. The age of the new person is :
A. 42 years
B. 40 years
C. 38 years
D. 45 years

## Answer: B

## D Watch Video Solution

4. The average age of 8 men is increased by 2
years when two of them whose age are 21 and
23 years replaced by two new men. The average age of the two new men is
A. 22 years
B. 24 years
C. 28 years
D. 30 years

## Answer: D

## D Watch Video Solution

5. The average age of eleven players of a cricket team decreases by 2 months when two new players are included in the team replacing
two players of age 17 years and 20 years. The average age of new player is
A. 17 years 1 month
B. 17 years 7 months
C. 17 years 11 months
D. 18 years 3 months

Answer: B

D Watch Video Solution
6. The average age of 20 boys in a class is 12
years. 5 new boys are admitted to the class
whose average age is 7 years. The average age of the boys in the class becomes
A. 8.2 years
B. 9.5 years
C. 12.5 years
D. 11 years

## Answer: D

7. The sum of the ages of mother and her daughter is 60 years. 12 years ago the mother was eight times as old as her daughter. How old is the daughter at present?
A. 20 years
B. 28 years
C. 16 years
D. 12 years

## Answer: C

## D Watch Video Solution

8. Out of 10 teachers of a school, one teacher
retires and at his place a new teacher of age

25 years joins. As a result of it, the average age of the teachers is reduced by 3 years. The age of the retired teacher is:
A. 60 years
B. 58 years
C. 56 years
D. 55 years

## Answer: D

## D Watch Video Solution

9. The average age of eight teachers in a school is 40 years. A teacher among them died
at the age of 55 years whereas another teacher whose age was 39 years joins them.

The average age of the teachers In the school now is (in years)
A. 35
B. 36
C. 38
D. 39

Answer: C
( Watch Video Solution
10. The present average age of a family of four members Is 36 years. If the present age of the youngest member of the family be 12 years,
the average age of the family at the birth of the youngest member was:
A. 48 years
B. 40 years
C. 32 years
D. 24 years

Answer: C

## - Watch Video Solution

11. The average age of 40 students of a class is

18 years. When 20 new students are admitted to the same class, the average age of the students of the class is Increased by 6 months.

The average age of newly admitted student is:
A. 19 years
B. 19 years 6 months
C. 20 years

## D. 20 years 6 months

## Answer: B

## D Watch Video Solution

12. If the average age of four children is 12
years and the average age of these children
and their father is 20 years, what is the age of
the father?
A. 52 years
B. 48 years
C. 62 years
D. 54 years

## Answer: A

## D Watch Video Solution

13. The average age of a family of 10 members
is 20 years. If the age of the youngest member of the family Is 10 years, then the average age of the members of the family Just before the
birth of the youngest member was approximately
A. 27.14 years
B. 12.5 years
C. 14.28 years
D. $11\left(\frac{1}{9}\right)$ years

Answer: D
( Watch Video Solution
14. The average age of four boys $A, B, C$ and $D$
is 5 years and the average age of $A, B, D, E$ is 6
years. C is 8 years old. The age of $E$ is (In years)
A. 12
B. 13
C. 14
D. 15

Answer: A

D Watch Video Solution
15. 5 years ago, the average age of $P$ and $Q$ was

15 years. Average age of P, Q and R today Is 20
years. How old will $R$ be after 10 years?
A. 35 years
B. 40 years
C. 30 years
D. 50 years

Answer: C

- Watch Video Solution

16. The average age of a husband and his wife was 23 years at the beginning of their marriage. After five years they have a one-year
old child. The average age of the family of three, when the child was born, was
A. 23 years
B. 24 years
C. 18 years
D. 20 years

## - Watch Video Solution

17. From a class of 42 boys, a boy aged 10 years goes away and in his place, a new boy is admitted. If on account of this change, the average age of the boys in that class increases by 2 months, the age of the newcomer is:
A. 19 years
B. 17 years
C. 10 years 6 months

## D. 12 years 2 months

## Answer: B

## D Watch Video Solution

18. The average age of Ram and his two children is 17 years and the average age of

Ram's wife and the same children is 16 years. If
the age of Ram is 33 years, the age of his wife
is (In years):
A. 31
B. 32
C. 35
D. 30

## Answer: D

## D Watch Video Solution

19. The average age of $A$ and $B$ is 20 years. If $A$
is to be replaced by C, the average would be 19
years. The average age of $C$ and $A$ is 21 years.
The ages of A, B and C In order (in years) are:
A. $18,22,20$
B. $18,20,22$
C. $22,18,20$
D. $22,20,18$

## Answer: C

## - Watch Video Solution

20. In a family of 5 members, the average age at present Is 33 years. The youngest member is

9 years old. The average age of the family Just before the birth of the youngest member was
A. 30 years
B. 29 years
C. 25 years
D. 24 years

Answer: A

D Watch Video Solution
21. Ram is 20 years younger than Shyam. 5
years ago, the ratio of their ages was 3:5. The sum of their present ages is :
A. 75 years
B. 80 years
C. 90 years
D. 95 years

Answer: C

D Watch Video Solution
22. The average age of 30 boys in a class is 15
years. One boy, aged 20 years, left the class, but two new boys came In his place whose age differ by 5 years. If the average age of all the boys now in the class becomes 15 years, the age of the younger newcomer Is :
A. 20 years
B. 15 years
C. 10 years
D. 8 years

Answer: B

## D Watch Video Solution

23. 3 years ago, the average age of a family of

5 members was 17 years. A baby having been
born, the average age of the family is the same today. The present age of the baby is :
A. 2 years
B. 2.4 years
C. 3 years

D. 1.5 years

## Answer: A

## D Watch Video Solution

24. Average age of 6 sons of a family is 8 years.

Average are of sons together with their parents is 22 years. If the father is older than the mother by 8 years, the age of mother (in
years) is :
A. 44
B. 52
C. 60
D. 68

## Answer: C

## D Watch Video Solution

25. Out of 10 teachers of a school, one teacher retires and at his place a new teacher of age

25 years joins. As a result of it, the average age of the retired teacher is:
A. 50 years
B. 55 years
C. 58 years
D. 60 years

Answer: B
( Watch Video Solution
26. Seven years ago, the average age of $A, B$ and $C$ was 51 years. If $A$ is 3 years older than $B$ and $B$ is 3 years older than $C$ then the present ages of $A, B$ and $C$ are (in years)
A. 61,58 and 55
B. 54,51 , and 48
C. 55,58 , and 61
D. 48,51 and 54

Answer: A
27. The average age of 45 persons is decreased
by $\frac{1}{9}$ year when one of them of 60 years is replaced by a new comer. Then the age of the new comer is :
A. 45 years
B. 55 years
C. 59 years
D. 49 years

Answer: B

## - Watch Video Solution

28. At the time of marriage of a son the average of age of mother, father and son is 42
yrs. After one year of marriage a baby is born when the baby turns 5 years old then the average age of whole family is 36 years. Find the age of their daughter-in-law at the time of her marriage.
A. 26 years
B. 25 years
C. 24 years
D. 23 years

## Answer: C

## - Watch Video Solution

29. The average age of 24 students is 12 years.

It was observed that while calculating the average age, the age of a student was taken as

14 years instead of 8 years. What will be the correct average age (in years)?
A. 11.25
B. 11.5
C. 11.75
D. 12.25

Answer: C
( Watch Video Solution
30. There were 24 students in a class. One of them, who was 18 years old, left the class and his place was filled up by a newcomer. If the average of the class thereby, was lowered by one month, the age of the newcomer is:
A. 14 years
B. 15 years
C. 16 years
D. 17 years

## - Watch Video Solution

31. From a class of 24 boys, a boy, aged 10 years, leaves the class and in his place a new boy is admitted. As a result, the average age of the class is Increased by 2 months. What is the age of the new boy?
A. 12 years
B. 15 years
C. 14 years

## D. 13 years

## Answer: C

## D Watch Video Solution

32. 5 years ago, the average age of $A, B, C$ and

D was 45 years. With $E$ joining them now, the average age of all the five is 49 years. How old is E ?
A. 25 years
B. 40 years
C. 45 years
D. 64 years

## Answer: C

## - Watch Video Solution

33. In a family, the average age of a father and a mother is 35 years. The average age of the father, mother and their only son is 27 years. What is the age of the son?
A. 12 years
B. 11 years
C. 5 years
D. 10 years

Answer: B

D Watch Video Solution
34. The average age of 9 students and their teacher is 16 yr . The average age of the first
four students is 19 yr and that of the last five is

10 yr . The teacher's age is
A. 36 years
B. 34 years
C. 30 years
D. 28 years

Answer: B
( Watch Video Solution
35. Numbers of boys and girls are ' $x$ ' and ' $y$ '
respectively. Ages of a girl and a boy are 'a'
years and 'b' years respectively. The average age (in years) of all boys and girls is:
A. $\frac{x+y}{b x+a y}$
B. $\frac{b x+a y}{x+y}$
C. $\frac{a x+b y}{x+y}$
D. $\frac{x+y}{a x+b y}$

Answer: B
36. The average age of eleven cricket players is

20 years. If the age of the coach is also
Included, the average age increases by $10 \%$.
The age of the coach is:
A. 48 years
B. 44 years
C. 40 years
D. 36 years

Answer: B

## D Watch Video Solution

37. The average age of a husband and a wife was 27 years when the child was born. The average age of the husband, the wife and a new-born child is 21 years now. The present age of the child is :
A. 4 years
B. 3 years
C. 2 years
D. 1 year

## Answer: D

## D Watch Video Solution

38. The average age of a husband and wife,
who were married 4 years ago, was 25 years at
the time of their marriage. The average age of
the family consisting of husband, wife and a
child, bom during the interval is 20 years today. The age of the child is
A. 1 year
B. 2 years
C. 2.5 years
D. 3 years

Answer: B
( Watch Video Solution
39. Five years ago, the average age of $P$ and $Q$
was 25 . The average age of $P, Q$ and $R$ today is
25. Age of R after 5 years will be:
A. 15 years
B. 20 years
C. 40 years
D. 35 years

Answer: B

D Watch Video Solution
40. In a school, the average age of students is

6 years, and the average age of 12 teachers is
40 years. If the average age of the combined group of all the teachers and students is 7 years, then the number of students is :
A. 396
B. 400
C. 408
D. 416

## - Watch Video Solution

41. In a school with 600 students, the average age of the boys is 12 years and that of the girls
is 11 years. If the average age of the school is 11
years and 9 months, then the number of girls
in the school is:
A. 450
B. 150
C. 250

D. 350

## Answer: B

## D Watch Video Solution

42. If out of 10 selected students for an examination, 3 were of 20 years, age, 4 of 21 and 3 of 22 years, the average age of the group is:
A. 22 years

## B. 21 years

C. 21.5 years
D. 20 years

## Answer: B

## - Watch Video Solution

43. 3 years ago, the average age of a family of

5 members was 17 years. A baby having been
born, the average age of the family Is same today. The present age of the baby is:
A. 1 year
B. $1\left(\frac{1}{2}\right)$ year
C. 2 years
D. 3 years

## Answer: C

## D Watch Video Solution

44. A man had 7 children. When their average age was 12 years, a child aged 6 years died. The average age of remaining six children is:
A. a) 13 years
B. b) 10 years
C. c) 11 years
D. d) 14 years

Answer: A

D Watch Video Solution
45. The average age of a cricket team of 11
players is the same as it was 3 years back because 3 of the players whose current
average age of 33 years were replaced by 3
youngsters. The average age of the newcomers is
A. 23 years
B. 21 years
C. 22 years
D. 20 years

Answer: C

D Watch Video Solution
46. The frequency distribution data is given below. If the average age is 17 years, the value of $m$ is:
$\begin{array}{llllll}\text { Age in (years) } & & 8 & 20 & 26 & 29\end{array}$
Number of people $\begin{array}{lllll} & 2 & m & 1\end{array}$
A. 1
B. 2
C. 3
D. 4

Answer: A
47. After replacing an old member by a new member, it was found that the average age of five members of a club is the same as it was 3
years ago. The difference between the ages of the replaced and the new members is:
A. 2 years
B. 4 years
C. 8 years
D. 15 years

## Answer: D

## D Watch Video Solution

48. Three years ago, the average age of a family of 5 members was 17 years. A baby
having been bom the average age of the family is the same today. The present age of the baby (in years) is:
A. 2
B. 2.4
C. 3

## D. 1.5

## Answer: A

## D Watch Video Solution

49. The average age of a class of 39 students Is

15 years. If the age of the teacher is included,
then the average increases by 3 months. Find the age of the teacher.
A. 30 years
B. 25 years
C. 35 years
D. 40 years

Answer: B

## D Watch Video Solution

50. The average age of Ram and Ra-him is 18 years. The average age of Rahim and Ramesh is 25 years. The average age of Ram and

Ramesh is 29 years. What is the age (in years)

## of the oldest of the three?

A. 14
B. 22
C. 28
D. 36

Answer: D

D Watch Video Solution
51. The average age of $P, Q$ and $R$ is 5 years more than R's age. If the total ages of $P$ and $Q$ together is 39 years, then R's age is:
A. a) 12 years
B. b) 24 years
C. c) 16 years
D. d) 14 years

Answer: A

D Watch Video Solution
52. The average age of Rustam and Preetam is 39 years. The average age of Preetam and

Geetam is 28 years. The average age of Rustam and Geetam is 34 years. What will be the age
(in years) of the youngest of the three after 10
years?
A. a) 13
B. b) 23
C. c) 33
D. d) 43

## Answer: C

## D Watch Video Solution

53. The average age of a husband and his wife was 23 years at the time of their marriage.

After five years they have a one year old child.

The average age of the family now is:
A. 29.3 years
B. 19 years
C. 23 years

## D. 28.5 years

## Answer: B

## D Watch Video Solution

54. The average age of 30 students of a class is

14 years 4 months. After admission of 5 new student in the class the average becomes 13 years 9 months. The youngest one of the five new students is 9 years 11 months old. The
average age of the remaining 4 new students is :
A. 11 years 2 months
B. 13 years 6 months
C. 12 years 4 months
D. 10 years 4 months

Answer: D
( Watch Video Solution
55. The average age of 6 members of a family
is 25 years. If the youngest member of the
family is 15 years old, then what was the average age (in years) of the family at the time of the birth of the youngest memoer?
A. 9
B. 12
C. 18
D. 24
56. The average age of 3 friends is 23 years.

Even if the age of 4th friend Is added, the average age remains the same. Then the age of the fourth friend is :
A. 20 years
B. 21 years
C. 22 years
D. 23 years

## Answer: D

## D Watch Video Solution

57. The average age of $a$ family with 5 members is 28 years. If one of the members of age 20 years is excluded, the average age of the family becomes
A. 25 years
B. 20 years
C. 30 years

## D. 24 years

## Answer: C

## D Watch Video Solution

58. The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:
A. 50 years
B. 40 years
C. 35 years
D. None of the options

Answer: B

- Watch Video Solution

59. Pushpa is twice as old as Rita was 2 years ago. If difference between their ages is 2 years, how old is Pushpa today?
A. a) 6 years
B. b) 8 years
C. c) 10 years
D. d) 12 years

Answer: B

## - Watch Video Solution

60. The average age of the boys in a class is 18 years. The average age of the girls in that class
is 12 years. If the ratio of the number of boys
and girls in that class Is $3: 2$, then the average age of the class is :
A. 15.6 years
B. 16.5 years
C. 15 years
D. 16 years

Answer: A
( Watch Video Solution
61. The sum of the ages of father and son at present is 33 years. Two years ago the product of their ages was 28 years. What is the age of the father and the son? (in years)
A. 26.7
B. 30.3
C. 29.4
D. 32.1

Answer: B
62. A man retired from his service at the age of 60. He served for $\frac{3}{5}$ th years of his retirement age. He joined his job at the age of:
A. 18 years
B. 20 years
C. 24 years
D. 36 years

Answer: C
63. The average age of four members of a family is 32 years. If the age of a guest is included, then the average age increases by
$12.5 \%$. What is the age (in years) of the guest ?
A. 52
B. 56
C. 44
D. 12

Answer: A

## - Watch Video Solution

64. Average age of a team having 12 players is

23 years. If the age of the coach is also
included, then the average age increases by 2
years. What is the age (in years) of the coach ?
A. 41
B. 47
C. 49
D. 51

## Answer: C

## D Watch Video Solution

65. 5 years ago the average age of a family
which includes father, mother and a son was

35 years. 3 years ago the average age of father and mother was 46 years. What is the present
age (in years) of the son?
A. 20
B. 24
C. 26
D. 22

## Answer: D

## - Watch Video Solution

66. Of the 3 numbers whose average is 22 . the
first is $\frac{3}{8}$ th the sum of other 2 . What is the first number ?
A. 16
B. 20
C. 22
D. 18

## Answer: D

## D Watch Video Solution

67. The average age of Rustam and Preetam Is

39 years. The average age of Preetam and

Geetam is 28 years. The average age of Rustam
and Geetam is 34 years. What will be the age
(in years) of the youngest of the three after 10
years?
A. 13
B. 23
C. 33
D. 43

Answer: C

- Watch Video Solution

68. The average age of 6 members of a family is 25 years. If the youngest member of the family is 15 years old, then what was the average age (in years) of the family at the time of the birth of the youngest memoer?
A. 9
B. 12
C. 18
D. 24

## - Watch Video Solution

69. Among four students sitting in a row, average age of last three students is 20 years and the average age of first three students is

21 years. If the age of first student is 26 years,
then what is the age (in years) of the last student?
A. 23
B. 37
C. 24
D. 29

## Answer: A

## D Watch Video Solution

70. Average age of 6 boys is 14 years. Average age of 11 girls is 12 years. What is the average age (in years) of all boys and girls?
A. 12.7
B. 14.6
C. 19.3
D. 8.5

## Answer: A

## D Watch Video Solution

71. Average age of 5 students of a school Is 14
years. The average age of students and their mathematics and science teachers is 30 years.

If the age of science teacher is 6 years more than the age of mathematics teacher, then
what is the age (in years) of mathematics
teacher?
A. 67
B. 68
C. 56
D. 74

Answer: A
( Watch Video Solution

## 72. Average age of 4 daughters of a family is 12

years. The average age of daughters and their parents is 26 years. If the mother is 4 years older than the father, what is the age (in years) of the father?
A. 56
B. 52
C. 48
D. 44

Answer: B

## - Watch Video Solution

73. The average age of Sita and Gita is 30 years. If Rita replaces Sita, then the average age will become 28 years and if Rita replaces

Gita, then the average age will become 32 years. What are the respective ages (in years) of Sita, Gita and Rita?
A. $40,44,36$
B. $44,40,36$
C. 34.26.30

D. $30,26,34$

## Answer: C

## D Watch Video Solution

74. The average age of 40 students in a class Is

12 years. When the age of teacher is included,
the average increases by 1 year. The teacher's age is:
A. 51 years
B. 53 years
C. 68 years
D. 48 years

Answer: B

D Watch Video Solution

## Type Ix

1. The average monthly Income of $A$ and $B$ is Rs

14000 , that of $B$ and $C$ Is Rs 15600 and $A$ and $C$
is Rs 14400 . The monthly income of C is:
A. Rs 16000
B. Rs 15000
C. Rs 14000
D. Rs 15500

Answer: A
2. The average monthly income of $X$ and $Y$ is Rs
5050. The average monthly income of $Y$ and $Z$
is Rs 6250 and the average monthly income of
$X$ and $Z$ is Rs 5200. The monthly Income of $X$ is
A. Rs 4050
B. Rs 3500
C. Rs 4000
D. Rs 5000
3. The average expenditure of a man for the
first five months is Rs. 1200 and for the next seven months is Rs. 1300 . Find his monthly average income if he saves Rs. 2900 during the year.
A. Rs 1500
B. Rs 1600
C. Rs 1700

## D. Rs 1400

## Answer: A

## D Watch Video Solution

4. The average monthly salary of 19 members of a group is Rs. 16000. If one more member whose monthly salary is Rs. 20000 Joins the group, then the average salary of the group is:
A. a) Rs 18250
B. b) Rs. 16200
C. c) Rs. 18000
D. d) Rs. 16250

Answer: B

## - Watch Video Solution

5. The average salary per head of all workers of an institution isर 60. The average salary per head of 12 officers is र 400 . The average salary
per head of the rest is र 56 . Then, the total number of workers in the institution is
A. 1030
B. 1035
C. 1020
D. 1032

Answer: D

D Watch Video Solution
6. The average monthly expenditure of a family
for the first four months is Rs 2570, for the next three months Rs 2490 and for the last five months Rs 3030. If the family saves Rs 5320
during the whole year, the average monthly Income of the family during the year is:
A. a) Rs 3000
B. b) Rs 3185
C. c) Rs 3200
D. d) Rs 3580

Answer: B

## D Watch Video Solution

7. A man spends Rs 1800 monthly on an average for the first four months and Rs 2000 monthly for the next eight months and saves Rs 5600 a year. His average monthly income is:
A. Rs 2000
B. Rs 2200
C. Rs 2400

## D. Rs 2600

## Answer: C

## D Watch Video Solution

8. The average salary of all workers in a workshop is Rs. 12000. The average salary of 7 technicians is Rs. 15000 and the average salary of the rest is Rs. 9000. The total number of workers in the workshop is :
A. 12
B. 13
C. 14
D. 15

## Answer: C

## D Watch Video Solution

9. A man spends in 8 months as much as he earns in 6 months. He saves Rs. 6000 in a year.

His average monthly income is:
A. Rs 2400
B. Rs 2000
C. Rs 2150
D. Rs 1800

Answer: B

## D Watch Video Solution

10. Average income of ' $A$ ' and ' $B$ ' is Rs 200 and average Income of 'C' and 'D' is Rs 250. The average income of $A B, C$ and $D$ is:
A. Rs 106.25
B. Rs 125
C. Rs 200
D. Rs 225

## Answer: D

## D Watch Video Solution

11. The average daily income of 7 men, 11 women and 2 boys is Rs. 257.50. If the average daily income of the men that of women and
the average daily income of the women is Rs.

10 more than that of boys, the average daily income of a man is:
A. Rs. 277.5
B. Rs. 250
C. Rs. 265
D. Rs. 257

Answer: C

D Watch Video Solution
12. The average salary of all the associates in a team is Rs. 16000. The average salary of 7 senior associates is Rs. 24000 and the average salary of the rest is Rs. 12000. How many associates work in that team?
A. a) 21
B. b) 22
C. c) 23
D. d) 24

## Watch Video Solution

13. The average expenditure of Raman for 5 days is Rs. 130. If his expenditure for the first 4 days is Rs. 100 , Rs. 125 , Rs. 85 and Rs. 160 respectively, what is his expenditure (in Rs.) of the 5th day?
A. 165
B. 180
C. 185
D. 195

Answer: B

## - Watch Video Solution

14. The average savings of Champak in 5 days
is Rs. 160. If his savings for the first 4 days is

Rs. 155, Rs. 170, Rs. 134 and Rs. 168 respectively,
then what is his saving (In Rs.) of the 5th day?
A. 161
B. 163
C. 169
D. 173

## Answer: D

## D Watch Video Solution

15. The average monthly income of $P$ and $Q$ is

Rs. 8500 , that of $Q$ and $R$ is Rs. 6450 and that of $P$ and $R$ is Rs. 7300.What is the monthly income of Q ?
A. Rs. 7,650
B. Rs. 7,000
C. Rs. 7,600
D. Rs. 8,650

Answer: A

## - Watch Video Solution

## Type X

1. A company produces an average of 4000
items per month for the first 3 months. How
much items, it must produce on an average per month over the next 9 months to average 4375 items per month over the whole year?
A. a) 4500
B. b) 4600
C. c) 4680
D. d) 4710

Answer: A

D Watch Video Solution
2. There are in all, 10 balls, some of them are red and the others white. The average cost of all balls is Rs 28 . If the average cost of red balls is Rs 25 and that of white balls is Rs 30 , the number of white balls is:
A. 3
B. 5
C. 6
D. 7

## - Watch Video Solution

3. The arithmetic mean of the scores of a group of students in a test was 52. The brightest $20 \%$ of them secured a mean score of 80 and the dullest $25 \%$ a mean score of 31.The mean score of remaining $55 \%$ is:
A. 0.45
B. 0.5
C. $51.4 \%$ approx.
D. $54.6 \%$ approx.

## Answer: C

## D Watch Video Solution

4. $A$ and $B$ have their annual average income

Rs. 80,000. B and C have their annual average

Income Rs. 75,000. C and A have their annual
average income Rs. 78,000. The annual income
of $A$ is
A. Rs. 81000
B. Rs. 82000

## C. Rs. 83000

D. Rs. 84000

## Answer: C

## D Watch Video Solution

5. A man's pension on retirement from service
is equal to half the average salary during last 3
years of his service. His salary from 1-1-1983 is Rs 380 per month with increment of Rs 40 due
on 1-10-83, 1-10-84 and 1-10-85, If he retires on $1-$

## $1-86$, what pension does he draw per month?

A. Rs 205
B. Rs 215
C. Rs 225
D. Rs 230

Answer: B
6. The average salary of all the workers in a
workshop is Rs 8000 . The average salary of 7
technicians is Rs 12000 and the average salary
of the rest is Rs 6000. The total number of
workers in the workshop is:
A. 20
B. 21
C. 23
D. 22

## - Watch Video Solution

7. The average (arithmetic mean) amount of savings of ten students is Rs. 600. Three of the students have no savings at all and each of the others have at least Rs. 250 including

Nihar, who has exactly Rs. 1300. The largest amount, in Rs., that any one student could have is:
A. Rs. 3250
B. Rs. 3450

## C. Rs. 3650

D. Rs. 3850

Answer: B

## D Watch Video Solution

8. In a family of 8 adults and some minors, the average consumption of rice per head per month is 10.8 kg , while the average consumption for adults is 15 kg per head and
for minors it is 6 kg per head. The number of minors in the family is:
A. 8
B. 6
C. 7
D. 9

Answer: C
( Watch Video Solution
9. The average monthly income (in Rs) of certain agricultural workers is S and that of other workers is T. The number of agricultural workers is 11 times that of other workers. Then,
the average monthly income (in Rs) of all the workers is:
A. $\frac{S+11 T}{12}$
B. $\frac{S+T}{12}$
C. $\frac{11 S+T}{12}$
D. $\frac{1}{11 S}+T$

## Answer: C

## D Watch Video Solution

10. The average of marks scored by the students of a class is 68 . The average of marks of the girls $\ln$ the class is 80 and that of boys is 60 . What is the percentage of boys in the class ?
A. 0.4
B. 0.6
C. 0.65
D. 0.7

Answer: B

## D Watch Video Solution

11. An army of 12000 consists of Europeans
and Indians. The average height of a European
is 5 ft 10 inches and that of an Indian is 5 ft 9
inches and that of the whole army is 5 ft
$9\left(\frac{3}{4}\right)$ inches.
Then the number of Indians in the army is:
A. 3000
B. 4000
C. 5500
D. 2700

Answer: A

D Watch Video Solution
12. The average pocket money of 3 friends $A$ , $\mathrm{B}, \mathrm{C}$ is Rs 80 in a particular month. If B spends double and $C$ spends triple of what $A$ spends during that month and if the average of their unspent pocket money is Rs 60 , then $A$ spends (in Rs)
A. Rs 10
B. Rs 20
C. Rs 30
D. Rs 40

Answer: A

## D Watch Video Solution

13. The average score of a-class of boys and girls in an examination is $A$. The ratio of boys and girls in the class is $3: 1$. If the average score of the boys is $A+1$, the average score of the girls is :
A. $A+1$
B. $A-1$

## C. $A+3$

$$
\text { D. } A-3
$$

## Answer: D

## D Watch Video Solution

14. If the average of $m$ numbers is $n^{2}$ and that of $n$ numbers is $m^{2}$. Then find the average of ( $\mathrm{m}+\mathrm{n})$ numbers.
A. $\frac{m}{n}$
B. $m+n$
C. $m n$
D. $m-n$

## Answer: C

## - Watch Video Solution

15. The average of the three numbers $x, y$ and $z$
is $45 . \mathrm{x}$ is greater than the average of y and z
by 9. The average of $y$ and $z$ is greater than $y$ by 2 . Then the difference of $x$ and $z$ is:
A. a) 3
B. b) 5
C. c) 7
D. d) 11

## Answer: C

## D Watch Video Solution

16. The average expenditure of a man for the
first five months of a year is Rs 5,000 and for
the next seven months it is Rs 5,400 . He saves

Rs 2,300 during the year. His average monthly income is:
A. Rs 5,425
B. Rs 5,500
C. Rs 5,446
D. Rs 5,600

Answer: A
( Watch Video Solution
17. The average of 8 numbers is 20 . The average of first tow numbers is $15 \frac{1}{2}$ and that of the next three is $21 \frac{1}{3}$. If the sixth number be less that the seventh and eight numbers by

4 and 7 respectively, then the eighth number is :
A. 20
B. 25
C. 21.6
D. 25.3

Answer: B

## - Watch Video Solution

18. 30 pens and 75 pencils altogether were purchased for Rs 510. If the average price of a pencil was Rs 2, what was the average price of a pen ?
A. Rs 9
B. Rs 10
C. Rs 11

## D. Rs 12

## Answer: D

## D Watch Video Solution

19. The average mathematics marks of two

Sections A and B of Class IX in the annual examination is 74 . The average marks of Section A is 77.5 and that of Section B is 70 .

The ratio of the number of students of Section
$A$ and $B$ is:
A. $7: 8$
B. $7: 5$
C. $8: 7$
D. $8: 5$

## Answer: C

## D Watch Video Solution

20. Visitors to a show were charged Rs. 15 each on the first day, Rs. 7.50 on the second day, Rs.
2.50 on the third day and total attendance on
three days were in the ratio $2: 5: 13$
respectively. The average charge per person
for the entire three days is
A. Rs 5
B. Rs 5.50
C. Rs 6
D. Rs 7

Answer: A

D Watch Video Solution
21. The average salary of all staff of a school is

Rs 10,000 . The average salary of 20 teaching
staff is Rs 12,000 and that of non-teaching
staff is Rs 5000 . the number of non-teaching staff will be:
A. 7
B. 8
C. 10
D. 12
22. B was born when $A$ was 4 years 7 months
old and C was born when B was 3 years 4
months old. When C was 5 years 2 months old, then their average age was
A. 8 years 9 months
B. 7 years 3 months
C. 8 years 7 months
D. 8 years 11 months

## Answer: D

## D Watch Video Solution

23. If the average of $x$ and $\frac{1}{x}(x \neq 0)$ is $M$,
then the average of $x^{2}$ and $\frac{1}{x^{2}}$ is:
A. a) $1-M^{2}$
B. b) $1-2 M$
C. c) $2 M^{2}-1$
D. d) $2 M^{2}+1$

## Answer: C

## D Watch Video Solution

24. 5 members of a team are weighed consecutively and their average weight calculated after each member is weighed. If the average weight increases by one kg each
time, how much heavier is the last player than
the first one ?
A. 4 kg

## B. 20 kg

C. 8 kg
D. 5 kg

## Answer: C

## D Watch Video Solution

25. The average temperature of Monday,

Tuesday, Wednesday and Thursday is $60^{\circ}$. The average temperature for Tuesday, Wednesday,

Thursday and Friday is $63^{\circ}$. If the ratio of
temperature for Monday and Friday is $21: 25$,
then what is the temperature of Friday?
A. $70^{\circ}$
B. $73^{\circ}$
C. $75^{\circ}$
D. $78^{\circ}$

Answer: D
( Watch Video Solution
26. In the afternoon , a student read 100 pages
at the rate of 60 pages $/ \mathrm{h}$. In the evening,
when she was tired she read 100 more pages
at the rate of 40 pages $/ \mathrm{h}$. What was her average rate of reading, in pages per hour ?
A. 60
B. 70
C. 48
D. 50

## - Watch Video Solution

27. Ram aims to score an average of 80 marks in quarterly and half yearly exams. But his average in quarterly is 3 marks less than his target and that in half yearly is 2 marks more than his aim. The difference between the total marks scored in both the exams is 25 . Total marks aimed by Ram is :
A. 400
B. 410

## C. 420

D. 380

## Answer: A

## D Watch Video Solution

28. While purchasing one item costing Rs 400, one has to pay sales tax at 7\% and on another costing ? 6400, the sales tax was $9 \%$. The per cent of sales tax one has to pay, taking these items together on an average is :
A. $8\left(\frac{13}{17}\right)$
B. $8\left(\frac{15}{17}\right)$
C. $8\left(\frac{1}{2}\right)$
D. 8

Answer: B

## D Watch Video Solution

29. On mixing two classes $A$ and $B$ of students
having average marks 25 and 40 respectively,
the overall average obtained is 30 . Find the ratio of the students in the classes $A$ and $B$.
A. $2: 1$
B. $5: 8$
C. $5: 6$
D. 3: 4

Answer: A
( Watch Video Solution
30. A man purchases milk for three consecutive years. In the first year, he purchases milk at the rate of Rs 7.50 per litre, In the second year, at the rate of Rs 8.00 per litre and in the third year, at Rs 8.50 per litre. If he purchases milk worth Rs 4,080 each year, the average price of milk per litre for the three years is:
A. Rs 7.68
B. Rs 7.98
C. Rs 7.54
D. Rs 7.83

Answer: B

## D Watch Video Solution

31. A fruit seller sold big, medium and small sized apples for Rs 15, Rs 10 and Rs 5 respectively. The total number of apples sold were in the ratio $3: 2: 5$. Find the average cost of an apple.
A. 8
B. 10
C. 9
D. 7

## Answer: C

## D Watch Video Solution

32. A man purchased 7 bags of rice at the rate of Rs 800 each, 8 bags of rice at X. 1000 each and 5 bags of rice at the rate of Rs 1200 each.

What is the average cost of one bag of rice?
A. Rs 1000
B. Rs 980
C. Rs 1120
D. Rs 1050

Answer: B

## D Watch Video Solution

## 33. The average (arithmetic mean) of

$3^{30}, 3^{60}$ and $3^{90}$ is
A. $3^{27}+3^{57}+3^{87}$
B. $3^{29} x 37$
C. $3^{29}+3^{59}+3^{89}$
D. $3^{177}$

## Answer: C

## D Watch Video Solution

34. In a team of 10 persons, nine persons spent Rs 40 each for their meal and the remaining one spent Rs 9 more than the
average expenditure of all the 10 persons. The total expenditure for their meal was
A. A)Rs 510
B. B)Rs 310
C. C)Rs 410
D. D)Rs 610

Answer: C

## D Watch Video Solution

35. In an examination average marks obtained by the girls of a class is 85 and the average marks obtained by the boys of the same class is 87 . If the girls and boys are in the ratio $4: 5$, average marks of the whole class
(approximately) is closest to
A. 85.9
B. 86.1
C. 86.4
D. 86.5

Answer: B

## D Watch Video Solution

36. A shop of electronic goods is closed on

Monday. The average sales per day for remaining six days of a week is Rs 15640 and the average sale on Tuesday to Saturday is Rs
14124. The sales on Sunday is:
A. Rs 21704
B. Data inadequate
C. Rs 23220
D. Rs 20188

## Answer: C

## D Watch Video Solution

37. Fifteen movie theatres average 600 customers per theatre per day. If six of the theatres close down but the total theatre attendance stays the same, then the average
daily attendance per theatre among the remaining theatres is:
A. 900
B. 1000
C. 1100
D. 1200

Answer: B
( Watch Video Solution
38. Last year, 5 companies had an average of 16 non working days each. This year, 3 companies
had 10 more non working days each, and 2 companies had 5 fewer non working days each.

What was the average number of non working days given by the same companies this year?
A. 12
B. 18
C. 20
D. 22

## Answer: C

## D Watch Video Solution

39. On 24th May, 2008 the maximum temperature of Delhi, Kolkata and Mumbai were recorded as $35^{\circ} \mathrm{C}, 33^{\circ} \mathrm{C}$ and $34^{\circ} \mathrm{C}$ respectively. What was the maximum temperature of Chennai so that the average maximum temperature of those cities would be $35^{\circ}$ ?
A. a) $34^{\circ} C$
B. b) $35^{\circ} C$
C. c) $36^{\circ} C$
D. d) $38^{\circ} C$

## Answer: D

## D Watch Video Solution

40. Eight members of a club donate Rs. 100 each towards a Relief Fund and the President of the club donates Rs. 50 more than the
average donation of all (including President)
of them. Then the contribution of the president is:
A. Rs. 106.25
B. Rs. 156.25
C. Rs. 56.25
D. Rs. 206.25

Answer: B

D Watch Video Solution
41. A team of 8 persons joins in a shooting competition. The best marksman scored 85 points. If he had scored 92 points, the average score for the team would have been 84 . The number of points the team scored was
A. 672
B. 665
C. 645
D. 588

## Watch Video Solution

42. A librarian purchased 60 story books for his library. But he found that he could get 4 extra books by spending Rs. 336 more and then the overall average price per book would be reduced by Rs 1 . The previous average price of each book was
A. Rs 84
B. Rs 83
C. Rs 68

## D. Rs 100

## Answer: D

## D Watch Video Solution

43. The average revenues of 7 consecutive
years of a company is Rs. 79 lakhs. If the average of first 4 years is Rs. 74 lakhs and that of last 4 years is Rs. 86 lakhs, what is the revenue for the 4th year?
A. Rs. 87 lakhs
B. Rs. 89 lakhs
C. Rs. 85 lakhs
D. Rs. 83 lakhs

## Answer: A

## D Watch Video Solution

44. The average revenue of 13 consecutive years of a company is Rs. 70 lakhs. If the average of first 7 years is Rs. 65 lakhs and that

## for the 7th year.

A. Rs. 86 lakh
B. Rs. 84 lakh
C. Rs. 82 lakh
D. Rs. 80 lakh

Answer: B
( Watch Video Solution
45. The average revenues of seven consecutive
years of a company is Rs. 83 lakh. If the average of first four years Is Rs. 78 lakh and that of last four years is Rs. 90 lakh, find the revenue for the fourth year.
A. Rs. 91 lakh
B. Rs. 93 lakh
C. Rs. 89 lakh
D. Rs. 87 lakh
46. Out of the five subjects, the average marks of Suman in first 3 subjects was 81 and the average marks in the last 3 subjects was 74. If her marks in the third subject was 65 , what was her average marks in all the subjects?
A. 75
B. 76
C. 79

## D. 80

## Answer: D

## D Watch Video Solution

47. Average of 8 numbers is 40 . The average of
first three numbers is 46 and the average of next two numbers is 50 . If the sixth number is

6 and 10 less than seventh and eighth number respectively, then what is the value of eighth number?
A. 28
B. 22
C. 30
D. 32

## Answer: D

## D Watch Video Solution

48. In a class of 70 students, $40 \%$ are girls and remaining are boys. The average marks of the boys are 63 and that of the girls are 70 . What
is the average marks of the whole class?
70 छात्रों की एक कक्षा में $40 \%$ लड़कियाँ और शेष लड़के हैं
| लड़कों का औसत अंक 63 तथा लड़कियों का औसत अंक
70 है | पूरी कक्षा का औसत अंक ज्ञात करें |
A. 65.4
B. 65.8
C. 65.2
D. 64.8

Answer: B

