MATHS

BOOKS - UNITED BOOK HOUSE

Statistics : Mean, Median, Ogive, Mode

Exercise

1. Multiple Choice Questions (MCQ) Mode of 9, 12, 15, 18, 21, 25, 27, 7, 8, 3, 11 is

A. 3

B. 2

C. 1

D. none of these

Answer:

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2. If the mode of 15, 12, 18, 8, 9, 16, 12, x, 18, 10 is 18, then the value of x is

A. 10

B. 12

C. 18

D. 16

Answer:

3. The mean of a frequency distribution is 8.1, if $\sum f_i x_i = 132 + 5K$ and $\sum f_i = 20$ then what is the value of K?

A. 2

B. 4

C. 6

D. 8

Answer:

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4. If the frequency of 12, 15 and 20 are (f + 2), f, (f -1) respectively and the mean of this frequency distribution is 14.5, then f =

A. 2

B. 3

C. 4

D. 5

Answer:

5. Median of 112, 98, 12, 62, 48, 30, 74, 94 is

A. 50

B. 64

C. 68

D. 72

Answer:

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6. If 35 is removed from the data 30, 34, 35, 36, 37, 38, 39, 40 then the median increased by

A. 0.5

B. 1

C. 1.5

D. 0.25

Answer:

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7. If the median of 20, 19, 7, 9, 17, 16, 11, x, 13 is 15 then the value of x is

A. 17

B. 14

C. 14.5

D. 15

Answer:

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8. Arranging the data 9, 10, 12, 15, (a + 1), (a + 3), 32, 35, 36, 40 in ascending order if the median is 20, then (a + 3) =

A. 18

B. 19

C. 21

D. none of these

Answer:

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9. The mean of r numbers of terms of a series is `bary. If the sum of 1st (r - 1) terms is R, then the rth term will be

A. $rabry - R.$

B. $r\bar{y} + R$

C. $(r-1)\bar{y} + R$

D. $(r-1)\bar{y} - R.$

Answer:

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10. In a cricket match the runs of 11 players are 14, 30, 43, 32, 12, 50, 58, 20, 0, 36, 37. Then the median of these euns is

A. 30

B. 32

C. 34

D. 36

Answer:

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11. Which of the following is not a measure of central tendency?

A. Mean

B. Median

C. Mode

D. Standard devition

Answer:

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12. The arithmetic mean of 1, 2, 3, ..., n is___

A. n + 1/2

B. n - 1/2

C. n/2

D. n/2 + 1

Answer:

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13. For a frequency distribution, mean, median and mode are connected by the relation

A. Mode = 3 mean - 2 mdian

B. Mode = 2 Median - 3 Mean

C. Mode = 3 Median - 2 Mean

D. Mode = 3 Median + 2 Mean

Answer:

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14. The mean of n observations is $\overline{X}$. If the first item is increased by 1, second by 2 and so on, then the new mean is___

A. $\overline{X} + n$

B. $\overline{X} + \frac{n}{2}$

C. $\overline{X} + \frac{n+1}{2}$

D. none of these

Answer:

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15. Mode is____

A. least frequent value

B. middle most value

C. most frequent value

D. none of these

Answer:

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16. If $u_i = \frac{x_i - 25}{10}, \sum f_i u_i = 20, \sum f_i = 100,$ then barx =

A. 23

B. 24

C. 27

D. 25

Answer:

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17. The mean of 1, 3, 4, 5, 7, 4 is m. The numbers 3, 2, 2, 4, 3, 3, p have mean m - 1 and median q. Then p + q equals___

A. 4

B. 5

C. 6

D. 7

Answer:

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18. If the median of the data : 24, 25, 26, x + 2, x + 3, 30, 31, 34 is 27.5. Then x equals___

A. 27

B. 25

C. 28

D. 30

Answer:

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19. The mean of a frequency distribution is 8.1, if $\sum f_i x_i = 132 + 5K$ and $\sum f_i = 20$ then what is the value of K?

A.

B.

C.

D.

Answer:

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20. The mean of first n odd natural numbers is $\frac{n^2}{81}$, then n equals___

A. 9

B. 81

C. 27

D. 18

Answer:

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21. If the mean of 6, 7, x, 8, y, 14 is 9, then___

A. $x + y = 21$

B. $x - y = 19$

C. $x + y = 19$

D. $x - y = 21$

Answer:

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22. If 35 is removed from the data 30, 34, 35, 36, 37, 38, 39, 40 then the median increased by

A. 2

B. 1.5

C. 1

D. 0.5

Answer:

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23. Median of a frequency distribution indicate graphically with the help of

A. Histogram

B. Frequency curve

C. Frequency polygon

D. Ogive

Answer:

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24. The mode can be obtained geometrically from

A. Histogram

B. Frequency polygon

C. Ogive

D. Frequency curve

Answer:

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25. If the mean of observations $x_i, x_2, \ldots\ldots, x_n$ is $\bar{x}$, then the mean of $(x_1 + a), (x_2 + a), \ldots\ldots, (x_n + a)$ is____

A. $\bar{x}$

B. $\bar{x} + a$

C. $\bar{x} - a$

D. $a\bar{x}$

Answer:

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26. The mode of 15, 17, 16, 16, 15, x, 19, 17, 14 is 15. The value of x is____

A. 17

B. 16

C. 17

D. 15

Answer:

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27. If the mean of a frequency distribution is 8.1 and $\sum f_i x_i = 132 + 5K, \sum f_i = 20$ then K =

A. 3

B. 4

C. 5

D. 6

Answer:

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28. If mode of a series exceeds its mean by 12, then mode exceeds the median by___

A. 4

B. 8

C. 6

D. 0

Answer:

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29. If the difference of mode and median of a data is 24, then the difference of median and mean is_____

A. 12

B. 24

C. 8

D. 36

Answer:

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