Statistics Practice

30 Minutes – (Don't skip any questions)

1) If Hritik paid an average of $\$25$ per sweater for four sweaters, and the average of the sweaters other than the most expensive sweater was $\$20$, how much did he pay for the most expensive sweater?

A. $\$ 30$ B. $\$ 35$ C. $\$ 40$ D. $\$ 50$ E. $\$ 60$

2) Quantitative Comparison:

The product of two integers is 10.

Quantity A	Quantity B
The arithmetic mean of the integers.	3

A. A > B B. B > A C. A = B D. Can't be determined

3) What is the arithmetic mean of the number of degrees in the interior angles of a pentagon and a hexagon?

A. 112 B. 114 C. 115 D. 116 E. $None$

4) Which of the following expressions represents the arithmetic mean (average) of the five terms $p,\ q,\ p+q,\ p-1$ and $q+1$?

A. $\frac{3}{5}(p+q)$ B. $\frac{2}{5}(p+q)$ C. $(p+q)$ D. $3(p+q)$ E. $5(p+q)$

5) The mean monthly salary paid to all employees in a company was $\$500$. The mean monthly salaries paid to male and female employees were $\$520$ and $\$420$ respectively. Determine the percentage of males in the company.

A. 60 B. 70 C. 80 D. 85 E. $None$

6) If the mean of a given set of five positive integers is the highest value of the set, which of the following is/are true?

I. $Range = 0$ II. $Standard\ Deviation = 0$ III. All the values are equal to the mean.

A. $I\ only$ B. $II\ only$ C. $III\ only$ D. $None$ E. $I, II\ and\ III$

7) The average weight for a group of 25 boys was calculated to be 80 lbs. It was later discovered that one weight was misread as 69 lbs. instead of the correct value of 96 lbs. Calculate the correct mean.

A. 78.92 B. 81.08 C. 81.8 D. 82 E. $None$

8) A train travels first 300 $miles$ at an average rate of 30 $miles/hr$ and further travels the same distance at an average rate of 40 $miles/hr$. What is the average speed (in miles/hr) over the whole distance?

A. 35 B. 34.28 C. 34.028 D. 34 E. $None$

9) If the sum of three numbers is $4x$ and the sum of four other numbers is $3x$, then the average (arithmetic mean) of all seven numbers is;

A. $7x$ B. 7 C. x D. $x/7$ E. 1

10) If a sum of money is divided equally among n children, each child will receive \$60. If another child is added to the group, then when the sum is divided equally among all the children, each child will receive a \$50 share. What is the sum of money?

A. \$ 3000 B. \$ 300 C. \$ 110 D. \$100 E. $None$

11) Quantitative Comparison:

M is the average (arithmetic mean) of x and y.

Quantity A	Quantity B
$\frac{M+x+y}{3}$	$\frac{x+y}{2}$

A. A > B B. B > A C. A = B D. Can't be determined

12) Which of the following is always true for a set of three consecutive integers?

I. $Median = Mean$ II. $Standard\ Deviation = \sqrt{\frac{2}{3}}$ III. Range is equal to the middle term

A. $I\ only$ B. $II\ only$ C. $III\ only$ D. $I\ and\ II$ E. $I\ and\ III$

13) Quantitative Comparison:

Quantity A	Quantity B
Standard Deviation of $(4, 4, 4)$	Standard Deviation of $(1, 0, 1)$

A. A > B B. B > A C. A = B D. Can't be determined

14) Quantitative Comparison:

Quantity A	Quantity B
The arithmetic mean of 100, 101 and 103	The median of 100, 101 and 103

A. A > B B. B > A C. A = B D. Can't be determined

15) If half the range of the increasing series $\{11, A, 23, B, C, 68, 73\}$ is equal to its median, what *CANNOT* be the value of C ?

A. 54 B. 30 C. 31 D. 65 E. 47

16) The only test scores for the students in a certain class are $44, 30, 42, 30, x, 44$ and 30. If x equals one of the other scores and is a multiple of 5, what is the mode for the class?

A. 5 B. 6 C. 15 D. 30 E. 44