

BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS SENIOR SECONDARYCO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL Pre-Mid Term- 2024-25 MATHEMATICS (041) ANSWER KEY



Class: VII
Date: 03.08.2024
Admission No.:

Duration: 1 Hrs. Max. Marks: 25

Roll No.:

General Instructions:

Questions 1 to 5 are 1 mark each. Questions 6 to 9 are of 2 marks each. Questions 10 and 13 are of 3 marks each.

SECTION-A $(5 \times 1 = 5)$

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Cn	ioose	tne:	correct	answer.

- 1) The place value of 8 in 5.389 is ______
 - a) 0.8
- b) **0.08**
- c) 0.008
- d)) None of these

- 2) What is 1.2×1.2?
 - a) 144
- b) 14.4
- c) **1.44**
- d)) None of these
- 3) Mode of the distribution 3, 5, 7,4,2,1,4,3,4 is ----
 - a) 1
- b)3
- c) **4**
- d) 7

- 4) What is $\frac{3}{5}$ of 25 _____
 - a) **15**
- b) 10
- c) 5
- d) None of these
- 5) The marks of 11 students of a class are given below:

87, 11, 99, 36, 49, 6, 87, 63, 30, 55, 22.

The range of marks is

- a) 90
- b) 91
- c) 92
- d) 93

SECTION-B

 $(4 \times 2 = 8)$

- 6) Solve: (1 marks for each correct answer)
 - a) $15.61 \times 100 = 1561$

b) $4.258 \times 1000 = 4258$

A car covers a distance of 15.8 km in one litre of petrol. How much distance will it cover in 10 litres of petrol?

Total distance covered by car in one liter of petrol = 15.8km

Total distance covered by by car in 10 liter of petrol =
$$15.8 \times 10$$
 ------(1)

= 158 Km

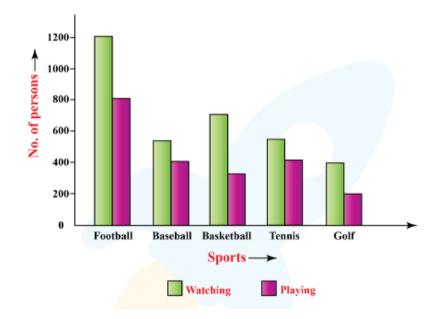
7) Multiply and express as mixed fraction:

$$7 \times 2\frac{1}{4}$$
 $7 \times \frac{9}{4} = \frac{63}{4} = 15\frac{3}{4}$ ----- (1)

8) The marks (out of 100) obtained by a group of students in a mathematics test are 85, 76, 90, 85, 39, 48, 56, 95, 81 and 75.

Find the: (1 mark for each correct answer)

- (i) Highest and the lowest marks obtained by the students. Highest = 95, Lowest = 39
- (ii) Range of the marks obtained. Range = Highest Lowest = 95 39 = 56
- 9) Observe this bar graph which is showing the data collected from a survey of a city. Answer the following questions ($\frac{1}{2}$ mark for each correct answer)
 - 1. Which game has the highest viewers? = Football
 - 2. Which game has the least viewers? = Golf
 - 3. Which sports team(s) has about 400 players? = Baseball
 - 4. How many basketball players are in the city? = 300



(4 X 3 = 12)

10) Solve: $(1\frac{1}{2}$ marks for each correct answer)

a)
$$\frac{3}{2} \times 5\frac{1}{3} = \frac{3}{2} \times \frac{16}{3} = 8$$

b)
$$\frac{4}{9} \div \frac{2}{3} = \frac{4}{9} \times \frac{3}{2} = \frac{2}{3}$$

11) Find: (1 mark for each correct answer)

a)
$$52.5 \div 10 = 5.25$$

b)
$$98.72 \div 100 = 0.9872$$

b)
$$98.72 \div 100 = 0.9872$$
 c) $128.9 \div 1000 = 0.1289$

OR

A vehicle covers a distance of 43.2 km in 2.4 litres of petrol. How much distance will it cover in one litre of petrol?

Total distance covered by vehicle in 2.4 liter of petrol = 43.2 Km

Total distance covered by vehicle in 1 liter of petrol = $43.2 \div 2.4$

$$=\frac{432}{10} \div \frac{24}{10} = \frac{432}{10} \times \frac{10}{24} = \frac{432}{24} = 18$$
Km ----- (2)

12) The runs scored in a cricket match by 11 players is as follows:

Find the mean, mode and median of this data. Are the three same?

Arranging the runs scored in a cricket match by 11 players in ascending order, we get

Mean of the given data = Sum of all observations/Total number of observations

$$= (6 + 8 + 10 + 10 + 15 + 15 + 15 + 50 + 80 + 100 + 120) / 11$$

∴ Median = value of ½ (n + 1)th observation

$$= \frac{1}{2} (11 + 1)$$

$$= \frac{1}{2} (12)$$

= 6

Then, the value of the 6th term = 15

No, these three are not the same.

13) Number of children in six different classes are given below. Represent the data on a bar graph.

Classes	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth
Number of children	115	100	85	90	80	75

