ARMY PUBLIC SCHOOL – AHMEDNAGAR

MATHS PT2 – QUESTION BANK

Simplification and Average

Q 1. Which of the following operation is performed first in simplifying a numerical expression?

(a) +   (b) ÷   (c) x   (d) -

Q 2. The average of first Five odd numbers is.......?

(a) 4   (b) 5   (c) 6   (d) 8

Q 3. The average of first three multiples of 10 is......?

(a) 20   (b) 10   (c) 5   (d) 8

Q 4. Choose the correct option.

48 + 3 x 18 ÷ 6 - 11= _____

(a) 81   (b) 78   (c) 46   (d) 52

Q 5. Choose the correct option.

80 – 40 ÷ 5 = _____

(a) 72   (b) 70   (c) 74   (d) 76

Q 6. **Assertion**: If the average of 5 numbers is 20, then the sum of the numbers is 100.

Reason: The average of a set of numbers is calculated by dividing the sum of the numbers by the total count of numbers.

- A) Both the assertion and the reasoning are true, and the reasoning is the correct explanation for the assertion.

- B) Both the assertion and the reasoning are true, but the reasoning is not the correct explanation for the assertion.

- C) The assertion is true, but the reasoning is false.

- D) The assertion is false, but the reasoning is true.

Q 7. Simplify using the DMAS Rule.

   56 − 36 ÷ 4 x 2 + 7

Q 8. Solve it.

   30 + 75 ÷ 15 x 4 - 18

Q 9. The average length of 4 pieces of duct tape is 9 inches. Find their total length.

Q 10. The average earning of 15 people in a month is ₹4500. Find their total earning in a month.

Q.11. Case study

ABC Electronics recently launched a new product. To monitor its performance, the company tracked daily sales over 5 days.

Sales Data (5 Days)

Day	Sales (Units)
1	120
2	150
3	135
4	110
5	145

a) What is the average daily sales for the 5 days?
b) Which day(s) had sales below the average?

Q.12. The following data shows the task completed by the employees working in Infosys India Limited.

Tasks Completed by Employees

Employee	Tasks Completed
1	48
2	52
3	50
4	45
5	?

a) If the average task completed by the employees is 50 , find the task completed by 5th employee?

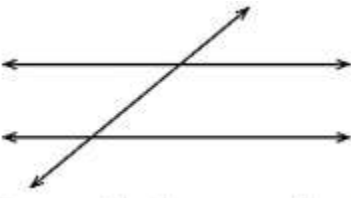b) What will be average task completed of first 3 employees?

Geometry

1. How many lines can pass through two given points?

a) 3   b) 2   c) 4   d) 1

2. The meeting point of two rays is called _____

a) angle   b) vertex   c) edge   d) parallel lines

3. A polygon with minimum number of sides is a _____

a) quadrilateral   b) circle   c) line   d) triangle

4. If the lines p and q never meet each other and has equal distance between them, they are _____

a) intersecting   b) equal   c) parallel   d) ray

5. Sanita used a thread to measure the length of boundary of her new bangle. The length of boundary of a circle is its _____

a) radius   b) centre   c) circumference   d) diameter

6. Assertion (A): A line contains a countless number of points.

Reason (R): Line extends indefinitely in both directions.
a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

7. Assertion (A): Given lines are parallel lines.

Reason (R): Two or more lines that lie in the same plane and never intersect each other are known as parallel lines

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

8. Assertion: In $\triangle$ ABC Side AB = 6 cm , Side BC = 6 cm and side AC = 5.5 cm

Reason: A triangle whose all sides are equal is called an an equilateral triangle.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

2. Solve the following

1. Check whether the following statement is true or false and give reason for your answer

The radius of a circle if 6.5 cm , its diameter is 14 cm and its circumference is 39 cm.

2. Complete the analogy

Triangle : Isosceles :: Angle : _____

a) Scalene   b) Acute   c) Square   d) Ray

3. Draw a circle of radius 4.5 cm . Draw diameter PQ and measure its length. Draw chord YZ.

4. Find the circumference of the circle if

a) radius = 8.5 cm   b) diameter = 9 cm

5. Draw the given angles

a) 65^0 b) 106^0

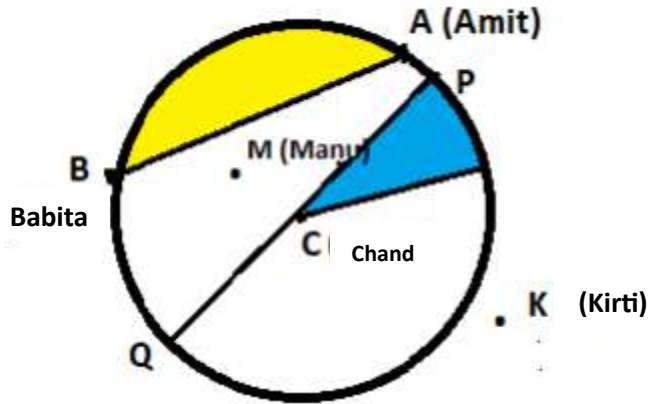6.How many vertices, sides and angles does a triangle have?

7.The sum of two angles of a triangle is 110^0 .Find the measure of the third angle.

8.Can $70^0,70^0,70^0$ be the measure of three angles of a triangle?

9. Two angles of a triangle are 100^0 and 55^0 respectively. Find the measure of the third angle.

10. Draw a circle with diameter 9 cm.

Case based question: Few students in a class were playing a game during PE lesson. They stand at different positions of the circle. Their location is denoted by the first letter of their name. Based on above information, answer the following questions.

(i) The line segment AB represents which part of the circle?

a) Diameter   b) chord   c) radius   d) centre

(ii) Kirti stands on which position of the circle?

   a) Exterior   b) Interior   c) boundary   d) None of these

(iii) Who stands at the center of the circle?

   a) Manu   b) Chand   c) Amit   d) Babita

(iv) Name the diameter of the circle ?

   a) AB   b) CP   c) PA   d) PQ