



BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY | CO-ED DAY CUM BOYS' RESIDENTIAL
SCHOOL

PERIODIC TEST-2 (2025)



MATHEMATICS MARKING SCHEME

Class : VIII
Date : 10-11-2025

Duration: 1 Hr
Max. Marks : 25

- I. MCQ (1 mark each)
1. 4 [B]
 2. $\frac{1}{2}$ [C]
 3. $-90 x^3 y$ [C]
 4. $7x$ and $9x$ [B]
 5. 0 [D]
6. $7x (6x - 8) + 15$ and find its value when $x = 3$
- $42x^2 - 56x + 15$ $\frac{1}{2}$
- When $x = 3$
- $42x^2 - 56x + 15 = 42 (3)^2 - 56 \times 3 + 15$ $\frac{1}{2}$
- $= 281$ 1
7. a) Subtract : $4a - 7ab + 3b + 12$ from $12a - 9ab + 5b - 3$
- $12a - 9ab + 5b - 3 - 4a + 7ab - 3b - 12$ $\frac{1}{2}$
- $8a - 2ab + 2b - 15$ $\frac{1}{2}$
- b) Add : $2p^2q^2 - 3pq + 4 + 8 + 7pq + 8p^2q^2$ $\frac{1}{2}$
- $10p^2q^2 + 4pq + 12$ $\frac{1}{2}$
8. i) Winter season got the most votes. $\frac{1}{2}$
- ii) Summer : $\frac{90}{360} \times 360 = 90^\circ$ $\frac{1}{2}$
- Rainy : $\frac{120}{360} \times 360 = 120^\circ$ $\frac{1}{2}$
- Winter : $\frac{150}{360} \times 360 = 150^\circ$ $\frac{1}{2}$
9. Total marbles : $5 + 8 + 4 = 17$ marbles 1
- p (getting white marble) = $\frac{8}{17}$ 1
10. Simplify : a) $(x + y) + (2x + y) + (x + 2y) (x - y)$ $\frac{1}{2}$
- $2x^2 + xy + 2xy + y^2 + x^2 - xy + 2xy - y^2$ 1

- $$3x^2 + 4xy - y^2 \quad \frac{1}{2}$$
- b) $2, 2y, 8y^2, 16y^3 = 1024y^6$ 1
11. a) $(2x + 5)(4x - 3) = 2x(4x - 3) + 5(4x - 3)$ $\frac{1}{2}$
- $$= 8x^2 - 6x + 20x - 15$$
- 1
- $$= 28x^2 - 6x - 15$$
- $\frac{1}{2}$
- b) $(x + 7y)(7x - y) = x(7x - y) + 7y(7x - y)$ $\frac{1}{2}$
- $$= 7x^2 + 48xy - 7y^2$$
- $\frac{1}{2}$
12. Total slips = 10 $\frac{1}{2}$
- a) $p(\text{getting } 6) = \frac{1}{10}$ $\frac{1}{2}$
- b) Numbers less than 6 = 1, 2, 3, 4, and 5. (5) $\frac{1}{2}$
- $$p(\text{getting less than } 6) = \frac{5}{10} \text{ or } \frac{1}{2}$$
- $\frac{1}{2}$
- c) $p(\text{probability of getting single digit}) = \frac{9}{10}$ 1
13. . Represent the following data by a pie chart 3

Source of energy	Electricity	Solar	Gas	Oil
No . of houses	20	10	12	6

- Central Angle of Electricity $= \frac{20}{48} \times 360^\circ = 150^\circ$ $\frac{1}{2}$
- Central Angle of Solar $= \frac{10}{48} \times 360^\circ = 75^\circ$ $\frac{1}{2}$
- Central Angle of Gas $= \frac{12}{48} \times 360^\circ = 90^\circ$ $\frac{1}{2}$
- Central Angle of Electricity $= \frac{6}{48} \times 360^\circ = 45^\circ$ $\frac{1}{2}$
- For Correct pie chart** 1
