



Octahedral classes, kharadi
2nd floor, yashwant plaza, near bank of India,

Class 08 - Mathematics
factorisation and mensuration

Maximum Marks: 30

Time Allowed: 1 hour and 30 minutes

Section A

1. Fill In The Blanks. 1

- a. The side of the square of area $16y^2$ is ____.
- b. The product of two negative terms is a ____.
- c. On dividing $(9x - 63)$ by 9 we get ____.
- d. The value of $(2x^2 + 4) \div 2$ is ____.

2. Fill In The Blanks. 1

- a. If the given expressions is in the form $x^2 + x(a + b) + ab$, then we factorize, it in the form ____.
- b. Factorized form of $4a^2 - 4a + 1$ is
- c. $a(b+c) =$ _____
- d. Common factor of $ax^2 + bx$ is ____.

3. Fill In The Blanks. 1

- a. An irreducible factor of $24x^2y^2$ is/are ____.
- b. Factorised form of $p^2 - 10p + 21$ is ____.
- c. Common factor of $17abc, 34ab^2, 51a^2b$ is ____.
- d. The product of $-4p$ and $7p$ is ____.

4. Work out the following division: $9x^2y^2(3z - 24) \div 27xy(z - 8)$ 2

5. Factorise: $p^4 - 81$ 2

6. Factorise the following expressions: $q^2 - 10q + 21$ 2

7. Factorize $6x^2 - 13x + 6$ 3

8. Factorize $3m^2 + 24m + 36$ 3

Section B

9. Fill up the blanks- 1

- a. Each exterior angle of a regular hexagon is of measure ____.

- b. A parallelogram each of whose angles measure 90degrees is _____.
- c. The diagonals of a rhombus bisect each other at _____ angle.
- d. The diagonal of a square bisect each other at _____ angle.

10. Fill up the blanks:-

1

- a. Each interior angle of a regular hexagon is of measure _____.
- b. A parallelogram each of whose sides and angles are equal is _____.
- c. The diagonals of a kite intersect at _____ angle.
- d. The sides and diagonals of square are _____.

11. Fill up the blanks-

1

- a. Area of parallelogram = 60cm^2 ; one of its altitude=____ ; length of other side= 6cm.
- b. All sides of _____ are equal. It is not a square but a quadrilateral.
- c. A polygon with 8 sides is _____.
- d. Adjacent sides of _____ are equal.

12. A flooring tile has the shape of a parallelogram whose base is 24 cm and the corresponding height is 10cm. How many such tiles are required to cover a floor of area 1080 m^2 ?

2

13. Find the surface area of a chalk box whose length, breadth and height are 16cm, 8cm and 6cm respectively.

2

14. Find the volume of cube whose Total Surface Area is 486cm^2

2

15. A rectangular piece of paper of dimensions 22cm by 10cm is rolled along its length to form a cylinder. Find the volume of cylinder formed.

3

16. If each edge of a cube is doubled.

3

(i) How many times will its surface area increase ?

(ii) How many times will its volume increase ?