

**HOLIDAY HOME WORK  
CLASS-VIII  
MATHEMATICS**

**Solve:**

1. What is the value of  $(-1)^{-1}$ ?
  - I. 0
  - II. -1
  - III. 1
  - IV. None of these
2. Which of the following is the value of 'm' in  $6^m / 6^{-3} = 6^5$ ?
  - I. -3
  - II. -2
  - III. 3
  - IV. 2
3. Which of the following is the standard form of 0.00001275?
  - I.  $1.275 \times 10^{-5}$
  - II.  $1.275 \times 10^5$
  - III.  $127.5 \times 10^{-7}$
  - IV.  $127.5 \times 10^7$
4.  $[(1/2)^{-1} + (2/3)^2 - (3/4)^0]^{-2}$  is equal to:
  - I. 81/484
  - II. 81/169
  - III. 169/81
  - IV. 16/81
5. Which of the following is the value of  $(4/5)^{-9} / (4/5)^{-9}$ ?
  - I.  $(4/5)^{18}$
  - II. 4/5
  - III. 1
6. Which of the following is the numerical coefficient of  $x^2y^2$ ?
  - I. 0
  - II. 1
  - III.  $x^2$
  - IV.  $y^2$
7. pqr is what type of polynomial?
  - I. Monomial
  - II. Binomial
  - III. Trimonial
  - IV. None of these
8. The value of  $x^2 - 5$  at  $x = -1$  is-
  - I. -2
  - II. -1
  - III. -4
  - IV. -5
9.  $a^2 - b^2$  is a product of
  - I.  $(a+b)(a-b)$
  - II.  $(a+b)(a+b)$
  - III.  $(a-b)(a-b)$
  - IV. None of these
10. Which of the following is obtained by subtracting  $x^2 - y^2$  from  $y^2 - x^2$ ?
  - I.  $-2(x^2 - y^2)$
  - II.  $-2(x^2 + y^2)$
  - III.  $2(x^2 + y^2)$
  - IV.  $2(x^2 - y^2)$

11. If F, E and V represent the faces, edges and vertices respectively of a polyhedral then which of the following is the Eulers formula?

- I.  $F - V + E = 2$
- II.  $F + V + E = 2$
- III.  $F + V - E = 2$
- IV.  $F + V = 2 - E$

12. If the edge of a cube is 1 cm then which of the following is its volume?

- (i)  $6 \text{ m}^3$
- (ii)  $3 \text{ m}^3$
- (iii)  $1 \text{ m}^3$
- (iv) none of these

13. If the edge of a cube is 1 cm then which of the following is its total surface area?

- (i)  $1 \text{ cm}^2$
- (ii)  $4 \text{ cm}^2$
- (iii)  $6 \text{ cm}^2$
- (iv) none of these

14. If base area of a room  $12 \text{ m}^2$  and height is 3 m then its volume is:

- (i)  $4 \text{ m}^3$
- (ii)  $36 \text{ m}^3$
- (iii)  $12 \text{ m}^3$
- (iv)  $18 \text{ m}^3$

15. Find  $(2x + 3y)^2$  using algebraic identities.

16.. Find the product of  $9a$ ,  $4ab$  and  $-2a$ .

17. Simplify  $(a + b + c)(a + b - c)$ .

18. Using identity evaluate:  $(99)^2$ .

19. A cuboid is of dimensions  $(60 \times 50 \times 30) \text{ cm}$ . How many small cubes with side 6 cm can be placed in the given cuboid?

20. Write all the formula for area and volume of cube, cuboid, cylinder and cone.

21. Find the area of rhombus whose diagonals are 8cm and 10cm.

22. If each side of a cube is doubled, how many times will its volume increase?  
cylinder.

23. Simplify  $2^5 / 2^6$ .

24. Express  $4^{-3}$  as a power with base 2.

25. Simplify and write the answer in exponential form:  $(2^5 / 2^8)^5 \times 2^{-5}$ .