



# ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution



**Sub: Arithmetic**  
**Duration: 40 Min**

**Class: 7**  
**Worksheet Solution 15**  
**EXPONENTS**

**Date: 06.03.21**  
**Full Marks: 15**

**Choose the correct options:**

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.  $1.275 * 10^{-5}$
  - II.  $1.275 * 10^5$
  - III.  $127.5 * 10^{-7}$
  - IV.  $127.5 * 10^7$
4. Which of the following is used as a form of  $5.05 * 10^6$ ?
  - I. 505000
  - II. 505000000
  - III. 5050000
  - IV. 50500000
5. For which of the following is  $m = 8$ ?
  - I.  $(5^m \times 5^{-3}) / 5^2 = 5^3$
  - II.  $-(5^m \times 5^{-3}) / 5^3 = 5^2$
  - III.  $(5^m \times 5^3) / 5^2 = 5^3$
  - IV.  $(5 \times 5^{-2}) / 5^2 = 5^3$
6. 1 micron =  $1/1000000$  m. which of the following is its standard form?
  - I.  $1.1 * 10^{-5}$
  - II.  $1.6 * 10^{-5}$

III.  $0.1 * 10^{-6}$

**IV.  $1.0 * 10^{-6}$**

7.  $[(1/2)^{-1} + (2/3)^2 - (3/4)^0]^{-2}$  is equal to:

I.  $81/484$

**II.  $81/169$**

III.  $169/81$

IV.  $16/81$

8. Which of the following =  $(100 - 99^0) * 100$ ?

I. 10000

II. 100

**III. 9900**

IV. 99000

9. What is the reciprocal of  $(-3/4)^0$ ?

I. -1

**II. 1**

III.  $-4/3$

IV.  $4/3$

10. Which of the following is the value of  $(4/5)^{-9} / (4/5)^{-9}$ ?

I.  $(4/5)^{18}$

II.  $4/5$

**III. 1**

IV.  $(5/4)^9$

11. Any quantity, other than zero, raised to a power of zero is always:

I. 10

**II. 1**

III. the original quantity

IV. -1

12. Simplify:  $(3x^4y^5)^2$

**I.  $9x^8y^{10}$**

II.  $6x^8y^{10}$

III.  $9x^6y^7$

IV.  $6x^6y^7$

13. In  $2^3$  what is the base?

- I. **2**
- II. 1
- III. 3
- IV.  $2^3$

14.  $5^{-2}$

- I.  **$1/25$**
- II.  $1/10$
- III. 25
- IV. 55

15. Simplify.

$s^{-5} \cdot s^{-2}$

- I.  $s^{-3}$
- II.  $1/s^{-7}$
- III.  **$s^{-7}$**
- IV.  $1/s^3$