



ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution



Sub: Arithmetic
Duration: 40 Min

Class: 7
Worksheet 15
EXPONENTS

Date: 05.03.21
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. $1/s^3$