



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :Algebra & GeometryWork sheet10

Marks:15 Exponents

Date:15.2.21

Answer all the following questions(1×15=15)

- In standard form 21600000 is written as
 - 2.16×10^7
 - 216×10^7
 - 2.16×10^5
 - 216×100000
- The value of 3^0 is _____.
 - 0
 - 3
 - 1
 - None of these
- When we have to add numbers in standard form, we convert them into numbers with the _____ exponents.
 - same
 - different
 - not equal
 - None of these
- Simplify: $2^5 \div 2^{-6}$
 - 2^9
 - 2^{11}

(c) 2^{10}

(d) None of these

5. 16 is the multiplicative inverse of

(a) 2^{-4}

(b) 2^8

(c) 8^2

(d) 2^4

6. Write the expression using exponents: $61 \times 61 \times 61 \times 61 \times 61$

(a) 6^{12}

(b) 6^{13}

(c) 6^{14}

(d) 6^{15}

7. Find the value of the expression a^2 for $a = 10$.

(a) 100

(b) 1

(c) 10

(d) None of these

8. Which one of the following is the value of 1^{15}

(a) 0

(b) 15

(c) 1

(d) None of these

9. Write the expression using exponents: $89 \times 89 \times 89 \times 89$

(a) 89^4

(b) 89^6

(c) 89^5

(d) None of these

10. In standard form 56700000 is written as _____

(a) 5.67×10^7

(b) 567×10^7

(c) 5.67×10^5

(d) 567×100000

11. Find the value of x, if $32 = 2^x$.

(a) 5

(b) 2

(c) 3

(d) 4

12. The approximate distance of moon from the earth is 384,467,000 m and in exponential form. This distance can be written as

(a) $3.84,467 \times 10^8$ m

(b) $384,467 \times 10^{-8}$ m

(c) $384,467 \times 10^{-9}$ m

(d) $3.844,67 \times 10^{-13}$ m

13. The expression, $(5^{-1} + 7^{-1} + 3^{-1})^0$ is equals to

(a) 15^{-3}

(b) -3

(c) 15^{-1}

(d) 1

14. Expand 1256.249 using exponents.

(a) $1 \times 10^3 + 2 \times 10^2 + 5 \times 10^1 + 6 \times 10^0 + 2 \times 10^{-1} + 4 \times 10^{-2} + 9 \times 10^{-3}$

(b) $1 \times 10^5 + 2 \times 10^2 + 5 \times 10^1 + 6 \times 10^0 + 2 \times 10^{-1} + 4 \times 10^{-2} + 9 \times 10^{-3}$

(c) $1 \times 10^4 + 2 \times 10^2 + 5 \times 10^2 + 6 \times 10^1 + 2 \times 10^3 + 4 \times 10^{-1} + 9 \times 10^{-2}$

(d) None of these

15. Find the multiplicative inverse of 7^{-2} .

(a) 7^4

(b) 7^3

(c) 7^5

(d) 7^2

Indranil Ghosh