



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :Algebra& GeometryWork sheet2 Answer key

Marks:15Exponents

Date:18.1.2021

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

1.The value of 2^{-2} is:

- A. 4
- B. $\frac{1}{4}$
- C. 2
- D. $\frac{1}{2}$

Ans: B

2. $2^2 \times 2^3 \times 2^4$ is equal to:

- A. 2^{24}
- B. 2^{-5}
- C. 2^9
- D. 2^{-9}

Ans:C

3. $3^{-2} \times 3^{-5}$ is equal to:

- A. 3^{-7}
- B. 3^{-3}
- C. 3^{-10}
- D. 3^7

Ans: A

4. $5^4/5^2$ is equal to:

- A. 5^6
- B. 5^{-6}
- C. 5^{-2}
- D. 5^2

Ans: D

5.The value of $(3^4)^3$ is:

- A. 3
- B. 3^{12}
- C. 3^7
- D. None of the above

Ans: B

$6.3^2 \times 4^2$ is equal to:

- A. 121
- B. 49
- C. 144
- D. 156

Ans: C

$7.5^7/6^7$ will give the value:

- A. $(\frac{5}{6})^7$
- B. $(\frac{5}{6})^0$
- C. $(\frac{5}{6})^{-7}$
- D. $(\frac{6}{5})^{-7}$

Ans: A

8. $100^0 + 20^0 + 5^0$ is equal to

- A. 125
- B. 25
- C. $1/125$
- D. 3

Ans: D

9. If $(-3)^{m+1} \times (-3)^5 = (-3)^7$, then the value of m is:

- A. 5
- B. 7
- C. 1
- D. 3

Ans: C

Explanation: $(-3)^{m+1} \times (-3)^5 = (-3)^7$

$$(-3)^{m+1+5} = (-3)^7$$

$$(-3)^{m+6} = (-3)^7$$

Since, base are equal on both the sides, hence if we compare the powers,

$$m+6 = 7$$

$$m = 7 - 6 = 1$$

10. What is the value of $(-1)^{-1}$?

- A. 0

- B. -1
- C. 1
- D. None of these

Ans: B

11. Which of the following is the value of 'm' in $6^m / 6^{-3} = 6^5$?

- A. -3
- B. -2
- C. 3
- D. 2

Ans: D

12. Which of the following = $(100 - 99^0) \times 100$?

- A. 10000
- B. 100
- C. 9900
- D. 99000

Ans: C

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

- A. -1
- B. 1
- C. -4/3
- D. 4/3

Ans: B

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

- A. $(4/5)^{18}$
- B. 4/5
- C. 1
- D. $(5/4)^9$

Ans: C

15. $[(1 / 2)^{-1} + (2 / 3)^2 - (3/4)^0]^{-2}$ is equal to:

- A. 81/484
- B. 81/169
- C. 169/81
- D. 16/81

Ans: B

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