

ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Arithmetic Duration: 40 min

Class: 7 Worksheet 6 EXPONENTS Date: 20. 04.20 Full Marks: 15

Choose the Correct options:

1) What is the value of $(3^0-4^0)\times 5^2$?

- A) 25
- B) O
- C) -25
- D) 1
- 2) What is the value of $(16/81)^2$?
- A) 9/2
- B) 2/9
- C) (2/3)⁸
- D) 27/8
- 3) Which of the following is true?
- A) 10×10¹¹=100¹¹
- B) $2^3 \times 3^2 = 6^5$
- C) 2³>3²
- D) p⁰=1000⁰
- 4) What is the value of $(12 \times 3^0 8 \times 5^0)$?
- A) 12
- B) 2
- C) 4
- D) 14
- 5) A Find the value of $2^0+3^0+4^0$.

A) 3

B) 234

C) 1

D) 24

6) What is the value of $2^7 \times 5^3$?

A) 7500

B) 16000

C) 11200

D) 14000

7) Which of the following is the least? $(-1)^3$, $(-10)^3$, $(1)^5$ and $(-1)^4$ A) 1^5

B) (-10)³

C) (-1)⁴

D) (-1)³

8) Write a×a×a×c×c×c×d×d in exponential form.

A) $a^3c^3d^3$

B) a³c³d

C) $a^3c^3d^2$

D) $a^3c^4d^2$

9) $(-11)^2 \times (-11)^4 = (-11)^x$. What is the value of x?

A) 2

B) 4

C) 6

D) –2

10) Which of the following statements is correct?

- A) $(2^3)^2$ and $(3^2)^4$ are not the same.
- B) $(2^{3})^{2}$ and $(3^{4})^{2}$ are the same.
- C) $(7^{50})^2 = 7^{502}$
- D) $(5^7)^3 = 5^{73}$
- 11) Evaluate $(5/6)^5$.
- A) (6/5)5
- B) (5⁶)⁵
- C) 5⁵/6⁵
- D) (5⁵)⁶

12) Which of the following values are equal?

- (i) 1^4 (ii) 4^0 (iii) 0^4 (iv) 4^1 A) (i) and (ii)
- B) (ii) and (iii)
- C) (i) and (iii)
- D) (i) and (iv)

13) What is the sum of the powers of the prime factors in 108×192?

- A) 5
- B) 7
- C) 8
- D) 12
- 14) Express $(-2)^3 \div m^3$ in the form (a/b)m.

A) $-2^{3}/m^{3}$

B) (-2/m)³

C) (-2)³m³

D) -(2/m)(-2/m)

15) What is the value of $[(1/4)^2 - (1/4)^3] \times 2^6$?

A) 1

- B) 2
- C) 3
- D) 4