



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Arithmetic
Duration: 40 min

Class: 7
Worksheet Solutions 17
EXPONENTS

Date: 13. 03.21
Full Marks: 15

Choose the Correct options:

1) What is the value of

$$(3^0 - 4^0) \times 5^2?$$

2) A) 25

B) 0

C) -25

D) 1

2) What is the value of

$$(16/81)^2?$$

3) A) 9/2

B) 2/9 C)

$$(2/3)^8$$

D) 27/8

3) Which of the following is true?

4) A) $10 \times 10^{11} = 100^{11}$

B) $2^3 \times 3^2 = 6^5$

C) $2^3 > 3^2$

D) $p^0 = 1000^0$

4) What is the value of

$$(12 \times 3^0 - 8 \times 5^0)?$$

5) A) 12

B) 2

C) 4

D) 14

5) A Find the value of

$$2^0+3^0+4^0.$$

6) A) **3**

B) 234

C) 1

D) 24

6) What is the value of

$$2^7 \times 5^3?$$

7) A) 7500

B) **16000**

C) 11200

D) 14000

7) Which of the following is the least?

$$(-1)^3, (-10)^3, (1)^5 \text{ and } (-1)^4$$

A) 1^5

B) **$(-10)^3$**

C) $(-1)^4$

D) $(-1)^3$

8) Write $a \times a \times a \times c \times c \times c \times c \times d \times d$ in exponential form.

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

B) $a^3 c^3 d$

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

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

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) $(5^6)^5$

C) $5^5/6^5$

D) $(5^5)^6$

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) $(-2)^3m^3$

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