



ST. LAWRENCE HIGH SCHOOL



TOPIC –Factorisation

Subject : Mathematics

Class-9

F. M. 15

WORKSHEET NO. - 20

First term

Date: 29.03.2021

Q.1) Choose the correct option:

(1x15=15)

- i) If $a^2 - b^2 = 63$ and a, b are negative integers ($a < b$) then the values of a and b are
a) $a=-8, b=-1$ b) $a=8, b=1$ c) $a=-8, b=1$ d) $a=8, b=-1$
- ii) If $x + y + z = 1$ then the factorization of $x + yz$ is
a) $(1-y)(1-z)$ b) $(x-y)(x-z)$ c) $(x+y)(1-z)$ d) $(y+z)(x+y)$
- iii) If $a^2 - b^2 = 13 \times 9$ (a, b are positive integers) then the values of a and b are
a) $a=11, b=2$ b) $a=13, b=9$ c) $a=39, b=1$ d) $a=26, b=3$
- iv) If $(x-1)^3 + (x-2)^3 + (x-3)^3 - 3(x-1)(x-2)(x-3) = 0$ then the values of x are
a) 1 b) 2 c) 3 d) 6
- v) If $\frac{a}{b} + \frac{b}{a} + 1 = 0$ then the value of $a^3 - b^3$ is
a) 1 b) 2 c) 0 d) 3
- vi) If $x^2 - px - 6 = (x+1)(x-a)$ is an identity then the values of a and p are respectively
a) $a=5, p=6$ b) $a=6, p=-5$ c) $a=6, p=5$ d) $a=6, p=1$
- vii) The value of $25^3 - 75^3 + 50^3 + 3 \times 25 \times 75 \times 50$ is
a) 300 b) 150 c) 25 d) 0
- viii) If $a^2 - b^2 = 192$ and a and b are negative integers ($a < b$) then the values of a and b are respectively
a) $a=-7, b=-1$ b) $a=-8, b=-2$ c) $a=-14, b=-2$ d) none of these
- ix) If the two factors of $m^3 - m$ are m and $m-1$ then the third factor is
a) m^2 b) $m^2 - 1$ c) $m + 1$ d) $m^2 + 1$
- x) If m and n are positive integers and $m-n$ is an even number then $m^2 - n^2$ will be divisible by
a) 4 b) 6 c) 8 d) 12
- xi) If $x + \frac{1}{x} = 1$ then the value of $x^2 + 1/x^2$ is
a) 2 b) 1 c) 0 d) -1
- xii) If $a=7, b=4, c=3$ then the value of $a^3 - b^3 - c^3 - 3abc$ is
a) 3 b) 0 c) 2 d) 1
- xiii) The value of 101×99 is _____
a) 90909 b) 9990 c) 9901 d) 9999
- xiv) If $a - b = 1$ and $a^3 - b^3 = 61$ then the value of ab is _____
a) 20 b) 21 c) 1 d) 61
- xv) If $\frac{x}{y} + \frac{y}{x} = -1$ then the value of $x^3 - y^3$ is
a) 8 b) 1 c) 0 d) -1

-Chaitali Roy