



ST. LAWRENCE HIGH SCHOOL



TOPIC –Revision

Subject : Mathematics

Class-9

F. M. 15

WORKSHEET NO.-7

Second Term

Date: 28.11.2020

Q.1) Choose the correct option :

(1 x 15 = 15)

- 1) If $4^x = 8^4$, then x is equal to
a) 4 b) 3 c) 6 d) 12
- 2) If $kx + 1$ is a factor of the polynomial $kx^2 - 5x - 3$, then the value of k will be
a) 1/2 b) 1/3 c) 2 d) - 2
- 3) If the cost price of 10 pens is equal to the selling price of 8 pens, then percentage of profit or loss is
a) 25% profit b) 20% loss c) 20% profit d) 25% loss
- 4) If $a + b + c = 0$, then the value of $\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab}$ is
a) 1 b) abc c) 2 d) 3
- 5) D, E and F are respectively the midpoints of the sides BC, CA and AB of the triangle ABC. FE intersects AD at the point O. If $AD = 6$ cm, then length of AO is
a) 4 cm b) 3 cm c) 2 cm d) 1.5 cm
- 6) If for the polynomial $f(x)$, $f(-\frac{1}{2}) = 0$, then one factor of $f(x)$ is
a) $2x - 1$ b) $2x + 1$ c) $x - 1$ d) $x + 1$
- 7) The area of the trapezium is 132 sq. cms. The length of one parallel side of it is 23 cm and its height is 6 cm. The length of the other parallel side is
a) 27 cm b) 31 cm c) 21 cm d) 20 cm
- 8) The length of the diameter of a circle is equal to the length of the side of a square. The ratio of their perimeters is
a) $\pi : 2$ b) $\pi : 4$ c) $2\pi : 3$ d) $\pi : 1$
- 9) If $2^x = 3^y = 6^{-z}$, then the value of $xy + yz + zx$ is
a) 1 b) 2 c) 3 d) 0
- 10) The coordinates of centroid of a triangle having vertices $(a - b, b - c)$, $(-a, -b)$ and (b, c) are
a) $(a, 0)$ b) $(0, b)$ c) (a, c) d) $(0, 0)$
- 11) If $\log_{10} x - \log_{10} \sqrt{x} = 1$, then the value of x is
a) 10 b) 100 c) 1/10 d) $\sqrt{10}$
- 12) Which among the numbers 4^{30} , 3^{40} , 2^{50} and 10^{20} is least?
a) 10^{20} b) 4^{30} c) 3^{40} d) 2^{50}
- 13) If the polynomial $x^3 + px^2 - 12x + 8$ is divisible by $(x + 2)$, then the value of p is
a) - 6 b) 8 c) 6 d) - 8
- 14) There is a rectangular area 6 m long and 4 m broad. For paving it with tiles 2 dcm square, how many tiles will be required?
a) 1200 b) 2400 c) 600 d) 1800
- 15) The three points $(2, 0)$, $(0, 3)$ and (t, t) will be collinear when t is equal to
a) 3 b) - 3 c) - 2 d) none of these