



ST. LAWRENCE HIGH SCHOOL



TOPIC –Revision

Subject : Mathematics

Class-9

Second Term

F. M. 15

WORKSHEET NO.-7

Solutions

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) 5
c) 6
d) 7
- 2) If $kx + 1$ is a factor of the polynomial $kx^2 - 5x - 3$, then the value of k will be
a) 1
b) 2
c) 3
d) 4
- 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) 25% loss
c) 20% profit
d) 20% 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) 2
c) 3
d) 4
- 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) 2 cm
b) 3 cm
c) 4 cm
d) 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) $x + \frac{1}{2}$
c) $2x - 1$
d) $x - \frac{1}{2}$
- 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) 17 cm
b) 18 cm
c) 21 cm
d) 22 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) $\pi : 4$
b) $4 : \pi$
c) $\pi : 2$
d) $2 : \pi$
- 9) If $2^x = 3^y = 6^{-z}$, then the value of $xy + yz + zx$ is
a) 1
b) 2
c) 3
d) 4
- 10) The coordinates of centroid of a triangle having vertices $(a - b, b - c)$, $(-a, -b)$ and (b, c) are
a) $(0, 0)$
b) $(\frac{a-b}{3}, \frac{b-c}{3})$
c) $(\frac{-a+b-c}{3}, \frac{-b+c-a}{3})$
d) $(\frac{a-b-c}{3}, \frac{b-c-a}{3})$
- 11) If $\log_{10} x - \log_{10} \sqrt{x} = 1$, then the value of x is
a) 100
b) 10
c) 1000
d) 10000
- 12) Which among the numbers 4^{30} , 3^{40} , 2^{50} and 10^{20} is least?
a) 4^{30}
b) 3^{40}
c) 2^{50}
d) 10^{20}
- 13) If the polynomial $x^3 + px^2 - 12x + 8$ is divisible by $(x + 2)$, then the value of p is
a) -6
b) 6
c) -8
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) 600
b) 60
c) 6000
d) 60000
- 15) The three points $(2, 0)$, $(0, 3)$ and (t, t) will be collinear when t is equal to
a) 1
b) 2
c) 3
d) none of these