WORKSHEET CLASS - VI

OLYMPIAD OF MATHEMATICS (2017-18)

Q1. Evaluate: [{(563 X 8) + 70} – 4384] ÷ 10

(a) 60
(b) 45
(c) 19
(d) 24
(e) None of these

Q2. Difference between the place values of 3 and 7 in 6,380,942 and 5,107,289 is:

(a) 29,300
(b) 27,300
(c) 273,000
(d) 293,000
(e) None of these

Q3. Sum of numerator and denominator of a fraction is 56. Denominator of the fraction is 2 greater than its numerator. Find the fraction.

(a) $\frac{7}{9}$
(b) $\frac{27}{29}$
(c) $\frac{29}{27}$
(d) $\frac{6}{35}$
(e) None of these

Q4. A shopkeeper bought 678 metre of cloth for ₹ 34578. What will be the selling price of one metre of cloth if shopkeeper has to sell ₹ 2.75 above the cost price of 1 metre of cloth?

(a) ₹ 63.75
(b) ₹ 26.00
(c) ₹ 53.75
(d) ₹ 28.25
(e) None of these

Q5. The HCF of 1 and a number is:

(a) 0
(b) 1
(c) 6
(d) The number itself
(e) None of these

Q6. What is the LCM of two prime numbers?

(a) Their addition
(b) Their product
(c) Their division
(d) 1
(e) None of these

Q7. If first, second and third terms of a proportion are first three natural numbers, then the fourth term will be:

(a) 6
(b) 2
(c) 4
(d) 5
(e) None of these

Q8. From the expression $5x + 7x + y + z$, find the terms which are not constant terms.

(a) 5x and y
(b) Y and z
(c) 5x and 7x
(d) All terms
(e) None of these

Q9. Find the measure of each angle of a triangle if one angle is two times of another and third one is the sum of the both angles.

(a) 45°, 30° and 80°
(b) 40°, 60° and 80°
(c) 30°, 60° and 90°
(d) All of the above
(e) None of these

Q10. Find the perimeter of a square whose area is 4 m^2.

(a) 7m
(b) 10m
(c) 9m
(d) 8m
(e) None of these

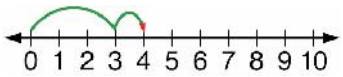
Q11. Which of the following letter of English alphabet does not have any line of symmetry?

(a) X
(b) O
(c) Z

(d) I

(e) None of these

Q12. Write the integer which is represented on the following number line.



(a) 1 more than 3

(b) 3 less than 4

(c) 4 more than 3

(d) 1 less than 3

(e) None of these

Q13. In a two digit number, the digit at the unit place is 4 times the digit at the tens place and sum of the digits is equal to 10. Then the number is.

(a) 37

(b) 46

(c) 28

(d) 19

(e) None of these

Q14. To construct an angle of 30°, what will you do?

(a) Bisect 60°

(b) Trisect 120°

(c) Draw perpendicular at 90°

(d) All of these

(e) None of these

Q15. The smallest possible three-digit number which is divisible by 8, 12 and 30.

(a) 108

(b) 120

(c) 240

(d) 360

(e) None of these

Q16. Jack is 2 years older than Jill and Jill is 7 years older than Zacob. The sum of their ages is 34. What would be the age of Jack?

(a) 15 years

(b) 14 years

(c) 13 years

(d) 11 years

(e) None of these

Q17. Subtract 4p + 7q – 19r from 6p – 12q – 37r

(a) 2p – 19q – 19r
(b) 2p – 19q + 18r
(c) 2p – 19q – 18r
(d) 2p – 19q + 19r
(e) None of these

Q18. If the 29^{th} day of a month fails on a Thursday, what is the date of the second Saturday in that month?

(a) 9
(b) 10
(c) 11
(d) 12
(e) 13

Q19. The LCM of two numbers is 175 and their HCF is 5. If one number is 25, then the other number will be:

(a) 15
(b) 25
(c) 35
(d) 45
(e) None of these

Q20. The monthly income of 7 people are ₹900, ₹500, ₹800, ₹4500, ₹1200, ₹1300, ₹600. What is their average income?

(a) ₹1400
(b) ₹1600
(c) ₹1800
(d) ₹2100
(e) None of these

Q21. In an auditorium, $\frac{8}{9}$ of total seats are occupied by people. If the total number of peoples in the auditorium are 824, how many number of seats are there in the auditorium?

(a) 828
(b) 927
(c) 1098
(d) 675
(e) None of these

Q22. Find the value of x, if $3x + \frac{1}{2} = 89$

(a) 29
(b) 29.5
(c) 30
(d) 35.5
(e) None of these

Q23. Convert the fraction $\frac{5}{7}$ into decimal.

(a) 0.01
(b) 0.001
(c) 0.714
(d) 0.075
(e) None of these

Q24. What percent of 65 is 54?

(a) 14.45%
(b) 85.34%
(c) 83.07%
(d) 88.67%
(e) None of these

Q25. The value of y in 5x + 34y = 14 is

(a) 1
(b) 2
(c) -1
(d) -2
(e) None of these

Q26. Choose the pair of supplementary angle from the options given below.

(a) 100° and 260°
(b) 105° and 75°
(c) 80° and 180°
(d) 90° and 180°
(e) None of these

Q27. Find mean of the following data.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10

(a) 5.5
(b) 4.5
(c) 6.5
(d) 7.5
(e) None of these