

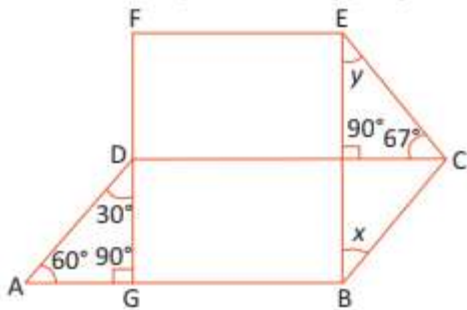
Subject - Maths

Grade - 8 (Set- A)

1. What is the smallest number by which 108 must be divided so that the quotient becomes a perfect cube? (a) 2 (b) 3 (c) 4 (d) 7 2. If $56x322$ is divisible by 18, then the least value of x is (a) 2 (b) 4 (c) 0 (d) 3 3. The largest four-digit number exactly divisible by each of 12, 15, 18 and 27 is (a) 9690 (b) 9720 (c) 9930 (d) 9960 4. Let O and P represent the numbers 0 and # respectively on the number line. Points Q, R and S are between O and P such that $OQ = QR = RS = SP$. What are the rational numbers represented by the points Q, R and S respectively? (a) $1/2$, $3/2$, $9/2$ (b) $3/4$, $3/2$, $9/4$ (c) $3/4$, $9/4$, $11/4$ (d) None of these 5. We get 47 as the remainder on dividing 342 by a number. If the same number is divided by 18, then what will be the remainder? (a) 5 (b) 7 (c) 9 (d) 11	6. Number of pieces of ribbon each $13/4$ m long that can be cut from a roll 39 m long are (a) 11 (b) 12 (c) 13 (d) 14 7. Solve: $130.02 + 113.26 - 27.1 - 17.4$ (a) 180.78 (b) 178.78 (c) 286.78 (d) 198.78 8. Value of $0.50 - (0.2 \times 1.5)$ is (a) 0.20 (b) 0.10 (c) 0.22 (d) 0.30 9. Which of the following fraction is improper? (a) $1/6$ (b) $3/6$ (c) $6/6$ (d) $9/10$ 10. A party of 10 people went to a hotel. They ordered a meal of Rs. 30.25 each, but 2 of them had forgotten to bring money. In order to settle the bill, how much more did the other 8 persons have to pay? (a) 7.5625 (b) 8.56 (c) 7.25 (d) 8.82 11. Evaluate: $(3^2)^3 + (2/3)^0 + 3^5 \times (1/3)^4$ (a) 15 (b) 633 (c) 733 (d) 565
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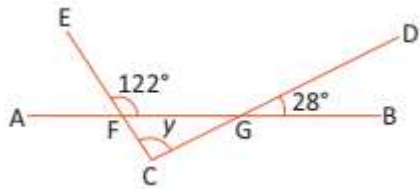
12. The missing exponent in the following expression is: $10^5 \times 10^? = 10000000$ (a) 4 (b) 7 (c) 0 (d) 2 13. If $x = 2$ and $y = 4$, then $(x) y/x + (y) x/y =$ _____ (a) 6 (b) 4 (c) 3 (d) 1 14. Reciprocal of $(4/5)^0$ is (a) 1 (b) $4/5$ (c) $5/4$ (d) 0 15. Find the value of $3^4[(2/3)^2 + (2/3) - (2/3)^3]$ (a) 86 (b) 66 (c) 68 (d) 88 16. Find x if $(39\% \text{ of } 640) + (x\% \text{ of } 590) = 414.8$ (a) 24 (b) 28 (c) 31 (d) 32 17. On a test containing 150 questions carrying 1 mark each, Mohan answered 80% of first 75 questions correctly. What percent of the other 75 questions does he need to answer correctly to score 60% in the examination? (a) 50% (b) 60% (c) 20% (d) 40% 23. If $a - b = 5$ and $a^2 - b^2 = 65$, then find	18. The maximum marks for an examination are 900. A student fails by 43 marks if he gets 33% of the maximum marks. What are the passing marks? (a) 332 (b) 360 (c) 340 (d) 375 19. Two numbers are such that 60% of one is equal to 40% of other and sum of numbers is 320. Find the larger number. (a) 192 (b) 156 (c) 128 (d) 184 20. The points P, Q, R and S lie on a straight line. The ratio of the length of PQ to the length of QR is 3 : 4 and the ratio of the length of PR to the length of RS is 2 : 1. Find the ratio of the length of QR to the length of PS. (a) 7 : 19 (b) 10 : 21 (c) 21 : 8 (d) 8 : 21 21. On dividing 6168 by a certain number, the quotient is 7 and the remainder is 1. Find the number. (a) 881 (b) 885 (c) 991 (d) 500 22. Write an equation for the following statement. In an isosceles triangle, the vertex angle is twice either base angle. (Let the base angle be b in degrees) (a) $4b = 180$ (b) $2b + c = 180$ (c) $2b + 2c = 180$ (d) None of the above
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the value of $a^2 + b^2$ (a) 10 (b) 47 (c) 85 (d) 97 24. When a number is multiplied with 5 times itself, it gives the value 1445. Find the number. (a) 18 (c) 19 (b) 15 (d) 17 25. The sum of three consecutive multiples of 7 is 1050. Find the numbers. (a) 343, 350, 357 (c) 400, 600, 50 (b) 340, 350, 360 (d) 345, 349, 356 26. Find the compound interest on Rs.6400 for 2 years, compounded annually at 7.5% per annum. (a) Rs. 996 (c) Rs. 1001 (b) Rs. 997 (d) Rs. 1100 27. The marked price of a heater is Rs.1250 and the shopkeeper allows a discount of 6% on it. Find the selling price of the heater. (a) Rs. 1570 (c) Rs. 1275 (b) Rs. 2342 (d) Rs. 1175	28. Store A and Store B both charge Rs. 750 for a video game. This week the video game is on sale for Rs. 600 at store B and for 25 % off at store A. At which store is the game less expensive? (a) Store A (b) Store B (c) Same at both stores (d) Cannot be determined 29. A man donated 5 % of his income to a charitable organisation and deposited 20 % of the remainder in a bank. Now, if he has Rs. 1919 left, what is his income? (a) Rs. 2558.50 (b) Rs. 2525 (c) Rs. 2500 (d) Rs. 2300 30. The CP of 25 articles is equal to the SP of 20 articles. Then gain% is (a) 25% (b) 20% (c) 30% (d) 50% 31. The perimeter of a rectangle whose one side measure 20m and the diagonal 29m is (a) 82m (c) 98m (b) 78m (d) 88m 32. In the given figure, ABCD is a parallelogram and GBEF is a rectangle. Find x and y respectively.
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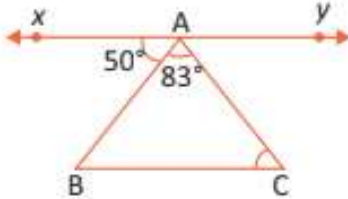
- (a) $30^\circ, 27^\circ$ (b) $30^\circ, 23^\circ$
 (c) $23^\circ, 30^\circ$ (d) $30^\circ, 21^\circ$

33. In the given figure, AFGB, CFE and CGD are straight lines. Find y.



- (a) 90° (b) 86°
 (c) 94° (d) 92°

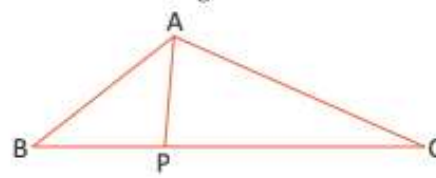
34. In the given figure below $XY \parallel BC$. Which of the following options represents the measure of angle x?



- (a) 47° (b) 83°
 (c) 93° (d) 112°

35. In the given figure P is the point on side BC. Which one of the following is correct?

40. A rectangular block $6 \text{ cm} \times 12 \text{ cm} \times 15$



- (a) $(AB + BC + CA) < 2AP$
 (b) $(AB + BC + CA) > 2AP$
 (c) $(AB + BC + CA) < AP$
 (d) $(AB + BC + CA) > AP$

36. The length and breadth of a rectangular hall are 24m and 18m respectively. What is the length of the largest straight line that can be drawn on the floor of the hall?

- (a) 24m (b) 28m
 (c) 30m (d) 34m

37. A circular road runs around a circular garden. If the difference between the circumference of the outer circle and inner circle is 44 m, then the width of the road is

- (a) 7 m (b) 5 m
 (c) 6.5 m (d) 7.5 m

38. Each side of a cube is increased by 50%, then the surface area of the cube is increased by

- (a) 50% (b) 100%
 (c) 125% (d) 150%

39. A solid has forty faces and sixty edges. Find the number of vertices of the solid.

- (a) 20 (b) 22
 (c) 24 (d) 26

46. Which of the following is known as

cm is cut into exact number of equal cubes. The least possible number of cubes will be (a) 6 (b) 11 (c) 33 (d) 40 41. Find the number of lines of symmetry of an isosceles triangle (a) 0 (b) 1 (c) 2 (d) 3 42. For constructing a square, the minimum number of measurements required is (a) 1 (b) 2 (c) 3 (d) 4 43. How many letters of the word RAM are symmetrical? (a) 0 (b) 1 (c) 2 (d) None of these 44. Which of the following given alphabets are symmetrical? (a) F (b) G (c) J (d) A 45. Find out the group of alphabets that have both horizontal and vertical lines of symmetry. (a) X, H, O (b) C, X, T (c) X, Y, Z (d) A, B, C	pictorial representation of data using symbols? (a) Pictograph (b) Bar graph (c) Pie chart (d) None of these 47. The number of sets of data represented by a double bar graph is (a) Four (b) Two (c) Three (d) Five 48. Each group in a grouped data, is known as (a) Class Interval (b) Collection of data (c) Frequency (d) Grouped frequency distribution 49. The difference between the upper limit and lower limit of a class is called (a) Frequency (b) Class width (c) Grouped data (d) Distribution 50. A bag contains 5 red balls and some blue balls. If the probability of drawing a blue ball is double that of a red ball. The number of blue balls in the bag is (a) 8 (b) 10 (c) 9 (d) 7
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