TRB-TET

VII STD Choose the best answer April 18, 2012

Chapter 1. REAL NUMBER SYSYTEM

- 1. The value of multiplying a zero with any other integer is 0
- 2. -15^2 is equal to -225
- 3. $15 \times (9) \times 0$ is equal to 0
- 4. The product of any two negative integers is a **posi- tive integer**
- 5. The product of a negative integer and zero is a 0
- 6. The product of two positive integers is a **positive** integer
- 7. The product of a positive integer and a negative integer is a **negative integer**
- 8. The cost of one pen is Rs.15. What is the cost of 43 pens? 645
- 9. Revathi earns 150 every day. How much money will she have in 10 days? 1500

- Division of integers is inverse operation of multiplication
- 11. $369 \div 1 = 369$
- 12. The product of two numbers is 105. One of the number is (21). What is the other number? -5
- 13. The set of integers is closed under addition.
- 14. Addition of integers is **commutative**.
- 15. Addition of integers is **associative**.
- 16. **zero** is the additive identity for integers
- 17. The set of integers is closed under **subtraction**.
- 18. Subtraction is **not commutative** for integers.
- 19. Subtraction of integers is **not associative.**
- 20. Integers are closed under **multiplication**.
- 21. Multiplication is **commutative** for integers.
- 22. The product of any nonzero integer with zero is **zero**.
- 23. 1 is the multiplicative identity for integers.
- 24. Integers are associative under multiplication.
- 25. Integers are distributive under **multiplication**.
- 26. Integers are **not closed** under division.
- 27. Integers are **not commutative** under division
- 28. Integers are **not associative** under division.
- 29. Mixed fraction = Natural number + Proper fraction

30. Vasu and Visu went for a picnic. Their mother gave them a baggage of 10 one litre water bottles. Vasu consumed $\frac{2}{5}$ of the water Visu consumed the remaining water. How much water did Vasu drink?

Vasu drank 4 litres.

31. Leela reads $\frac{1}{4}$ th of a book in 1 hour. How much of the book will she read in $3\frac{1}{2}$ hours?

Leela reads $\frac{7}{8}$ part of a book in $3\frac{1}{2}$ hours.

- 32. A car runs 20 km. using 1 litre of petrol. How much distance will it cover using $2\frac{3}{4}$ litres of petrol. 55km
- 33. How many uniforms can be stitched from $47\frac{1}{4}$ metres of cloth if each scout requires $2\frac{1}{4}$ metres for one uniform? 21 **uniforms.**
- 34. Unlimited (infinite) number of rational numbers between any two rational numbers.
- 35. $\frac{3}{8}$ is called a **positive rational number**
- 36. The proper negative rational number is $\frac{-10}{9}$
- 37. A fraction is a **rational number**.
- 38. The sum of two rational numbers is 1. If one of the numbers is $\frac{5}{20}$ find the other.

Required number is $\frac{3}{4}$

39. $\frac{1}{3} + \frac{2}{3}$ is equal to 1

- 40. The sum of two rational numbers is 1. If one of the numbers is $\frac{1}{2}$, the other number is $\frac{1}{2}$
- 41. The product of two rational numbers is $\frac{2}{9}$. If one of the numbers is $\frac{1}{2}$, find the other rational number.

Required rational number is $\frac{4}{9}$

- 42. Find the value of 27.69 14.04 + 35.072 10.12. **The value is** 38.602.
- 43. The length of a rectangle is 6.3 cm and its breath is 3.2 cm. What is the area of the rectangle?

Area of the rectangle = $20.16 cm^2$

- 44. A car covers a distance of 129.92 km in 3.2 hours. What is the distance covered by it in 1 hour?

 40.6 km.
- 45. Find: $8.75 \div 0.25 = 35$
- 46. A motorist covers a distance of 135.04 km in 3.2 hours. Find his speed? 42.2 km/hour.
- 47. Express the number 144 as a product of powers of prime factors. $144 = 2^4 \times 3^2$
- 48. $a \times a \times a \timesn$ times is equal to a^n .
- 49. $a^m \times a^x$ is equal to a^{m+x}
- 50. The division of two integers

need not be an integer.

Chapter 2. ALGEBRA

- 51. The numerical coefficient in -7xy is -7
- 52. The numerical coefficient in -q is -1
- 53. 12 subtracted from z is 12 Z
- 54. n multiplied by -7 is -7n
- 55. Three times p increased by 7 is 3p + 7
- 56. The degree of a constant is 0.
- 57. The degree of the expression $5m^2 + 25mn + 4n^2$ is 2
- 58. If p = 40 and q = 20, then the value of the expression (p q) + 8 = is 28
- 59. The degree of the expression $x^2y + x^2y^2 + y$ is 4
- 61. If m = -4, then the value of the expression 3m + 4 is -8
- 62. If p = 2 and q = 3, then the value of the expression (p+q) (p-q) is 5
- 63. Sum of 4x, -8x and 7x is 3x
- 64. Sum of 2ab, 4ab, -8ab is -2ab
- 65. 5ab + bc 3ab is 2ab + bc
- 66. $5y 3y^2 4y + y^2$ is $y 2y^2$
- 67. If A = 3x + 2 and B = 6x 5, then A B is -3x + 7
- 68. Three sides of a triangle are 3a + 4b 2, a 7 and 2a 4b + 3. What is its perimeter? 6a 6

- 69. The sum of 5 times x, 3 times y and 7 is 5x + 3y + 7
- 70. One half of the sum of numbers a and b is $\frac{1}{2}(a+b)$
- 71. Three times the difference of x and y is 3(y-x)
- 72. 2 less than the product of y and z is yz 2
- 73. Half of p added to the product of 6 and q is $\frac{p}{2} + 6q$
- 74. Solve $(3x+1)7 = 12 \ x = 6$
- 75. If p + 3 = 9, then p is 6
- 76. If 12 x = 8, then x is -20
- 77. If $\frac{q}{6} = 7$, then q is 42
- 78. If 7(x-9) = 35, then x is 14
- 79. Three times a number is 60. Then the number is 20
- 80. The sum of two numbers is 33. If one number is 18, what is the other number? 15
- 81. 8 years ago, I was 27 years old. How old am I now? 35
- 82. Algebra is a branch of Mathematics that involves alphabet, numbers and mathematical operations.
- 83. A variable or a literal is a quantity which can take various numerical values.
- 84. A quantity which has a fixed numerical value is a constant.

85. An algebraic expression is a combination of variables and constants connected by

the arithmetic operations.

- 86. Expressions are made up of terms.
- 87. Terms having the same variable or product of variables with same powers are called Like terms. Terms having different variable or product of variables with different powers are called **Unlike terms**.
- 88. The degree of an expression of one variable is the highest value of the exponent of the variable. The degree of an expression of more than one variable is the highest value of the sum of the exponents of the variables in different terms.
- 89. A statement in which two expressions are equal is called **an equation**.
- 90. An equation remains the same if the LHS and RHS are interchanged.
- 91. The value of the variable for which the equation is satisfied is called **the solution of the equation**.
- 92. If 60 is subtracted from a number, the result is 48. then the number is 12
- 93. $\frac{1}{10}$ of a number is 63. What is the number? 630

- 94. Sum of three consecutive integers is 45. Find the integers x = 14, 15, 16
- 95. Thendral's age is 3 less than that of Revathi. If Thendrals age is 18, what is Revathis age?

Hence Revathi's age is 21 years.

- 96. Rams father gave him 70 rupees. Now he has 130 rupees. How much money did Ram have in the beginning? 60
- 97. A number when added to 60 gives 75. What is the number? x=15
- 98. A number divided by 4 and increased by 6 gives 10. The number is **the number is** 16
- 99. The sides of a rectangle are 3x + 2 and 5x + 4. Find its perimeter. 16x + 12
- 100. A ribbon is cut into 3 pieces in the ratio 3:2:7. If the total length of the ribbon is 24 m, find the length of each piece.

The length of the three pieces of ribbon are 6m, 4 m, 14 m respectively.

Best wishes by

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