

MATHS

BOOKS - RD SHARMA MATHS (ENGLISH)

OPERATIONS ON WHOLE NUMBERS



1. Find the sum of 654, 392 and 108.



2. Determine the sum by suitable re-arrangement:

$$637 + 908 + 636$$



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3. Do the following calculations by suitable rearrangements:

$$31 + 32 + 33 + 34 + 35 + 65 + 66 + 67 + 68 + 69$$



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4. Fill in the blanks to make each of the following a true statement: $359 + 476 = 476 + \dots$

$$\dots + 1952 = 1952 + 200890758 + 0 = \dots$$



5. Add each of the following and check by reversing the order of addends:

10 + 11 + 12 + 13 + 14 + 15 + 16 + 17 + 18 + 19 + 20

1+2+3+4+1996+1997+1998+1999

6. Which of the following statements are true and which are false? The sum of two odd numbers is an odd number. The sum of two odd numbers is an even

number. The sum of two even numbers is an even number. The sum of two even numbers is an odd number. The sum of an even number and an odd number is an odd number. The sum of an odd number and an odd number is an even number Every whole number is a natural number. Every whole number is a whole number. There is a whole number which when added to a whole number, gives that number. There is a natural number which when added to a natural number, gives that number. Commutativity and associativity are properties of whole numbers Commutativity and associativity are properties of addition of whole numbers.



7. Perform following subtractions and check your answer by corresponding additions: 2020201 - 565656 (ii) 100000 - 98765



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8. Replace each * by the correct digit in each of the following: 5376 - * * 59 = 46*7



9. A magic square is an array of numbers having the same number of rows and columns and the sum of the numbers in a row column and the sum of the numbers in each row column or diagonal being the same. Fill in the blank cells of the following magic square.



10. Gorang had Rs. 61000. He gave Rs. 8775 to Ashok, Rs. 12638 to Akbar and Rs. 35000 to Anthony. How much money was left with him?



11. EXAMPLE 3 A magic square is an array of numbers having the same number of rows and columns and the sum of the numbers in a row column and the sum of the numbers in each row column or diagonal being the same. Fill in the blank cells of the following magic square.



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12. Perform the following subtractions and check your results by performing corresponding additions: 57839 - 2983 (ii) 92507 - 10879

13. Perform the following subtractions and check your results by performing corresponding additions: 200000 - 97531 (ii) 3030301 - 868686



14. What is the difference between the largest number of five digits and the smallest number of six digits?



15. Find the difference between the largest number 4 digits and the smallest number of 7 digits.



16. Rohit deposited Rs. 125000 in his savings bank account. Later he withdrew Rs. 35425 from it. How much money was left in his account?



17. The population of a town is 96209. If the number of men is 29642 and that of women is 29167,

determine the number of children.



18. The digits of 6 and 9 of the number 36490 are interchanged. Find the difference between the original number and the new number.



19. The population of a town was 59000. In one year it was increased by 4536 due to new births. However, 9218 persons died or left the town during the year. What was the population at the end of the year.



20. Find the following products: $4 \cdot 4957 \cdot 25$



21. Determine the following products by suitable rearrangement: $8 \cdot 125 \cdot 40 \cdot 25$



22. Find the values of each of the following using various properties: $538 \times 8 + 538 \times 2$



23. Multiply 475 by 64.



24. Multiply 5217 by 325



25. The product of two 2-digit numbers is 1938. If the product of their units's digits is 28 and that of ten's digits is 15, find the numbers.

26. Determine the product of the greatest number of four digits and the greatest number of three digits.



27. Fill in the blanks to make each of the following a true statement: (i) $785 \times 0 = \,$ (ii) $4567 \times 1 = \,$ (iii)

$$475 imes 129 = 129 imes$$
 (iv) $imes 8975 = 8975 imes 1243$ (v)

$$10\times100\times...=10000$$



28. Determine each of the following products by suitable rearrangements: $2\ x\ 1497\ x\ 50$



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29. Using distributivity of multiplication over addition of whole numbers, find each of the following products: $736\ x\ 103$



30. Find each of the following products: $736 \ x \ 93$



31. Find the values of each of the following using properties: $493 \times 8 + 493 \times 2$



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32. Determine the product of: The greatest number of five digits and the greatest number of three digits



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33. In each of the following, fill in the blanks, so that the statements is true: (500+7)(300-1)=299 x

34. A dealer purchased 125 colour television sets. If the cost of each set is Rs. 19820, determine the cost of all sets together.



35. The annual fee charged from a student of class VI in a school is Rs. 8880. If there are, in all, 235 students in class VI, find the total collection.



36. A group housing society constructed 350 flats. If the cost of construction for each flat is Rs. 993570, what is the total cost of construction of all the flats.



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37. The product of two whole numbers is zero. What do you conclude?



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38. What are the whole numbers which when multiplied with itself gives the same number?

39. In a large housing complex, there are 15 small buildings and 22 large building. Each of the large buildings has 10 floors with 2 apartments on each floor. Each of the small buildings has 12 floors with 3 apartments on each floor. How many apartments are there in all.



40. Divide 46087 by 356



41. Find the number which when divided by 46 gives a quotient 11 and remainder 18.



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42. Does there exist a whole number a such that $a \div a = a$?



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43. Find the value of:

(i) $23457 \div 1$

(ii) $0 \div 97$



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44. Find the value of: $(2758 \div 2758) - (2758 \div 2758)$



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45. Which of the following statements are true:

$$10 \div (5 x 2) = (10 \div 5)x (10 \div 2)$$

and

$$(35-14) \div 7 = 35 \div 7 - 14 \div 7$$



46. Divide and check the quotient and remainder:

 $7772 \div 58$



47. Find the number which when divided by 35 gives the quotient 20 and remainder 18.



48. Find the number which when divided by 58 gives a quotient 40 and remainder 31.



49. The product of two numbers is 504347. If one of the numbers is 1591, find the other.



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50. On dividing 59761 by a certain number, the quotient in 189 and the remainder is 37. Find the divisor.



51. On dividing 55390 by 299, the remainder is 75. Find the quotient using division algorithm.



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52. Without drawing a diagram, find (i)10th square number (ii) 6th triangular number



53. Can a rectangular number also be a square number? Can a triangular number also be a square number?

54. Write the first four products of two numbers with difference 4 starting from in the following order: 1, 2, 3, 4, 5, 6, Identify the pattern in the products and write the next three products



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55. Observe the pattern in the following and fill in the

blanks:

 $9 \times 9 + 7 = 88$ $98 \times 9 + 6 = 888$

 $987 \times 9 + = 8888$

 $9876 \times 9 + 4 = .$

 $98765 \times 9 + 3 = .$

 $987654 \times 9 + 2 =$

 $9876543 \times 9 + 1 =$



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56. Observe the following pattern and extend it to three more steps:

$$6 x 2 - 5 = 7$$

$$7 \times 3 - 12 = 9$$

$$9 x 5 - 32 = 13$$

 $8 \times 4 - 21 = 11$



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$$1\,x\,1 + 2\,x\,2 \hspace{1.5cm} = \hspace{.1cm} rac{2\,x\,3\,x\,5}{6}$$

$$1 x 1 + 2 x 2 + 3 x 3 = \frac{3 x 4 x 7}{6}$$

$$1\ x\ 1+2\ x\ 2+3\ x\ 3+4\ x\ 4=\frac{4\ x\ 5\ x\ 9}{6}$$
 observing the above pattern, write next two steps.



58. Study the following pattern:
$$2 x 3 x 5$$

$$1 x 1 + 2 x 2 = \frac{2 x 3 x 3}{6}$$

$$egin{array}{lll} 1\,x\,1 + 2\,x\,2 + 3\,x\,3 & = & \dfrac{3\,x\,4\,x\,7}{6} \ 1\,x\,1 + 2\,x\,2 + 3\,x\,3 + 4\,x\,4 = \dfrac{4\,x\,5\,x\,9}{6} \end{array}$$

59. Which one of the following is the smallest whole number?

(a)1

(b)2

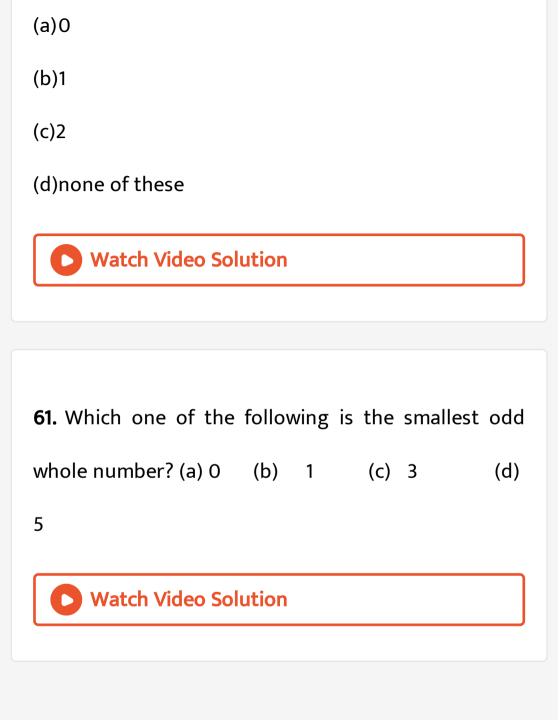
(c)0

(d)none of these



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60. Which one of the following is the smallest even whole number?



62. How many whole numbers are between 437 and 487?

(a)50

(b)49

(c)51

(d)none of these

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63. The product of the successor 999 and predecessor of 1001 is (a) One lakh (b) one billion (c) one million (d) one crore



64. Which one of the following whole numbers does not have a predecessor?

(a)1

(b)0

(c)2

(d)none of these



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65. The number of whole numbers between the smallest whole number and the greatest 2-digit number is

(a) 1(b) 2(c) 3(d) none of these

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n+n=n, then n=?

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66. If n is a whole number such that

(a)101

(b)100

(c)99

(d)98

67. The predecessor of the smallest 3-digit number is

(a)999

(b)99

(c)100

(d)101



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68. the least number of 4-digits which is exactly divisible by 9 is

(a) 1008 (b) 1009 (c) 1026 (d) 1018



69. The number which when divided by 53 gives 8 as quotient and 5 as remainder is

- (a)424
- (b)419
- (c)429

(d)none of these



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70. The whole number n satisfying n+35=101 is

- (a)65
- (b) 67

(c) 64

(d) 66



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71. The value of $4 \times 378 \times 25$ is (a) 37800 (b) 3780 (c) 9450 (d) 30078



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72. the value of $1735 \times 1232 - 1735 \times 232$ is

(a)17350

(b) 173500

(c) 1735000

(d) 173505



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73. The value of 47×99 is:

(a)4635

(b)4653

(c)4563

(d)6453



74. Which one of the following is not a natural number?

(a)1

(b)10

(c)0

(d)20



75. If n is an (a) odd natural number greater than 1, then the product of its successor and predecessor is an odd natural number (b) is an even natural number (c) can be even or odd (d) None of these

76. The number of whole number between the smallest whole number and the greatest three digit number is

- (a)1000
- (b)999
- (c)998

(d)None of these



77. If x+12=12+7, then the commutativity of addition x= (a) 12 (b) 7 (c) 19 (d) 5



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78. If (31+15)+x=31+(15+23), then by using associativity of addition x=

- (a)46
- (b) 38
- (c) 23
- (d) 69



79. What is the multiplicative identity element in the set of whole numbers? (a) 0 (b) -1 (c) 1 (d) None of these



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80. What is the additive identity element in the set of whole numbers? (a) 0 (b) -1 (c) 1 (d) None of these



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81. If n is an even natural number, then the product of its successor and predecessor (a) is an even natural

number (b) is an odd natural number (c)can be even or odd (d) None of these



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- 82. Additive inverse of 28 is
- (a) $\frac{1}{28}$
- (b) 0
- (c) -28
- (d) 82



83. Which of the following is not zero?

- (a) 0×0
- (b) $\frac{0}{2}$
- (c) $\frac{(6-6)}{2}$
- (d) 4 + 0



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84. Determine the product of the greatest number of three digits and the smallest number of two digits.



85. Simplify $754 \times 845 + 754 \times 155$ by using distributivity of multiplication over addition.



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86. Match the following $625\ x\ 436 = 625\ x\ 400 + 625\ x\ 30 + 625\ x\ 6$

60 + 19758 + 840 = 60 + 940 + 19758



 $25 \times 69 \times 8 = 25 \times 8 \times 69$

87. Determine the following sum by using suitable rearrangement: 2+3+4+5+45+46+47+48



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88. Complete the following magic square by supplying the missing numbers: (Figure)



89. Replace * by correct digit in the following:

$$5001003 - *6987 = 484 \star \cdot$$



90. Shikkha withdraw Rs. 1,00,000 from her bank account. She purchased a TV set for Rs. 38,750, a refrigerator for Rs. 23,890 and jewellery worth Rs. 35,560. How much money was left with her?



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91. Find $15908 \times 542 =$





93. On dividing 55390 by 299, the remainder is 75. Find the quotient



94. Fill in the blanks: The sum of two odd numbers is an number.



95. The product of an odd number and even number is an number.



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96. Property 7 (Division Algorithm) If a whole number a is divided by a non-zero whole number b then there exists whole numbers q and r such that a=bq+r whole either r=0 or r< b.





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98. A number when divided by 12 gives 7 as quotient and 9 as remainder. The number is

