



MATHS

BOOKS - RD SHARMA MATHS (ENGLISH)

KNOWING OUR NUMBERS

Others

1. The value of
$$(a \times b)^2$$
 is $\left|\overrightarrow{a}\right|^2 + \left|\overrightarrow{b}\right|^2 - \left(\overrightarrow{a}\overrightarrow{b}\right)^2$ b.
 $\left|\overrightarrow{a}\right|^2 \left|\overrightarrow{b}\right|^2 - \left(\overrightarrow{a}\overrightarrow{b}\right)^2$ c. $\left|\overrightarrow{a}\right|^2 + \left|\overrightarrow{b}\right|^2 - 2\left(\overrightarrow{a}\overrightarrow{b}\right)^2$
d. $\left|\overrightarrow{a}\right|^2 + \left|\overrightarrow{b}\right|^2 - \overrightarrow{a}\overrightarrow{b}$



2. Write the following numbers in digit. Also, express

them in expanded form.

Five lakh forty two thousand fifty seven

Seven lakh six hundred eight

Thirty five lakh eight hundred twenty nine.

Nine crore fifty six lakh thirty four thousand seventy

four.



3. Write each of the numbers arranged in the following place value chart in words. Also, write each

number in the expanded form. Periods, Crores Lakhs, Lakhs, Thousands, Ones Places, Ten Crores, Crores, Ten Lakhs, Lakhs , Ten Thosuands, Thousands, Hundreds, Tens, Unites (L) (i), , 4, 7, 5, 0, 0, 2, 9, 8 (ii), 7, 8, 0, 5, 1, 0, 0, 2, 4



4. Write the following numbers by separting periods

using commas according to the indian numeral system:

(i) 8435

(ii) 76502

A. (i) 84, 35

(ii) 76, 502

B. (i) 8, 435

(ii) 76, 502

C. (i) 8, 43, 5

(ii) 7, 65, 02

D. (i) 8, 435

(ii) 765, 02

Answer: B



5. Write the following numbers by separting periods

using commas:

(i)94332705

(ii)943875

A. (*i*)94, 332, 705

(ii) 9, 43, 875

B. (*i*)9, 43, 32, 705

(ii) 9, 43, 875

C. (*i*)943, 32, 705

(ii) 943, 875

D. (*i*)9, 43, 32, 705

(*ii*) 94, 38, 75



7. Insert commas correctly and write the following numerals: Seventy three lakh seventy five thousand three hundred seven. Nine core five lakh forty one. Twenty three lakh thirty thousand ten Seven crore fifty

two lakh twenty one thousand three hundred two.

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8. Find the difference of the place values of two 8's in the number 578493087.

A. 7999990

B. 8999920

C. 7999920

D. 8999820

Answer: C



9. Find the difference of the place value and face value

of the digit 2 in the numeral 3124698.

A. 19, 988

B. 18, 998

C. 19, 998

D. 19, 798

Answer: C



10. Write all 3-digit numbers using the digit 2, 3, 5,

taking each digit only once.



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11. In a four digit number, the digit in thousand's place in 4 and the digit in the one's place is twice that in the thousand's place. The number has no hundreds. The ten's place digit is the difference between the digit in the thousand's place and the hundred's place. Find the number.



12. Write each of the following in numeral form: Eight thousand twelve. Seventy thousand fifty three Five lakh seven thousand four hundred six Six lakh two thousand nine. Thirty lakh eleven thousand one. Eight crore four lakh twenty five Three crore three lakh three thousand three hundred three. Seventeen crore sixty lakh thirty thousand fifty seven.

13. Write the following numbers in words in the Indian

system of numeration: 42,007 (ii)

4,05,045 35,42,012 (iv) 7,06,04,014

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14. Write the following numbers in words in the Indian system of numeration: (i)25,05,05,500(ii)5,50,50,050 (iii)5,03,04,012



15. Insert commas in the correct positions to separate

periods and write the following numbers in words:

4275 (b) 24798 (iii) 857367

16. Insert commas in the correct positions to separate periods and write the following numbers in words:(i) 9050784 (ii) 10105607 (iii) 10000007

(iv) 910107104



17. Write each of the following in expanded notation:

(i) 3057 (ii) 12345 (iii) 10205 (iv) 235060



18. Write the corresponding numeral for each of the following:

a.

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\begin{array}{l} 7\times \ 10000+2\times \ 1000+5\times \ 100+9\times \ 10+6\times \ 1\\ \text{b.}\ 4\times \ 100000+5\times \ 1000+1\times \ 100+7\times \ 1\\ \text{c.}\ 8\times \ 1000000+3\times \ 1000+6\times \ 1\\ \text{d.} \end{array}
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 $5 imes \ 10000000 + 7 imes \ 1000000 + 8 imes \ 1000 + 9 imes \ 10 + 4$

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19. Find the place value of the digit 4 in each of the

following: (i) 74983160 (ii) 8745836





20. Determine the product of the place values of two

fives in 450758

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21. Determine the difference of the place values of two

7's in 257839705

22. Which digits have the same face value and place

value in 92078634 ?



23. How many different 3-digit numbers can be formed

by using the digits 0, 2, 5 without repeating any digit

in the number?



24. Write all possible 3-digit numbers using the digits

6, 0, 4, when repetition of digits is not allowed



25. Fill in the blanks: 1 lakh = ... ten thousand 1 lakh = ... thousand 1 lakh = ... hundred 1 lakh = ... ten 1 crore = ... ten lakh 1 crore = ... lakh 1 crore = ... ten thousand 1 crore = ... Thousand 1 crore = ... hundred 1 crore = ... ten

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26. Write each of the following numbers in digits. Also, express them in expanded form: (i)Four million five hundred twenty thousand six hundred seventy eight.

(ii)Twenty five million thirty five thousand seventy eight. (iii)Eight million nine thousand eight. (iv)Five billion sixty four million seven hundred fifty four thousand three hundred five.

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27. Rewrite each of the following numerals with proper commas in the international system of numeration. Also, write the number name of each in the international system. (i)984765 (ii) 4032897 87594652 (iv) 257403082

28. Following numbers are given in Indian system of numeration. Write each in the international system of numeration: Forty two lakh seventy thousand eight. Two crore ninety lakh fifty five thousand eight hundred twenty seven. Seven crore sixty thousand fifty five.

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29. Following numbers are given in International system of numeration. Re-write each in the Indian system of numeration. Eight million five hundred forty six thousand two hundred eighty three. Seventy seven

million forty eight thousand one hundred five. Eighty

million twenty five thousand forty eight.



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30. Write each of the following numbers in digits by using international place value chart. Also, write them in expanded form. Seven million three hundred three thousand two hundred six. Fifty five million twenty nine thousand seven. Six billion one hundred ten million three thousand seven.



31. Rewrite each of the following numerals with proper

commas in the international system of numeration.

(i) 4035672

(ii) 65954923

(iii) 70902005

A. (i) 40, 356, 72

(ii) 65, 954, 923

(iii) 709, 02, 005

B. (i) 4035, 672

(ii) 659, 5, 4923

(iii) 709, 020, 05

C. (i) 4, 035, 672

(ii) 65, 954, 923

(iii) 70, 902, 005

D. (i) 4, 035, 672

(ii) 6, 59, 54, 923

(iii) 709, 020, 05

Answer: C



32. Write each of the following numbers in the international system of numeration: Forty three lakh

four thousand eighty four Six crore thirty four lakh four thousand forty four. Seven lakh thirty five thousand eight hundred ninety nine only.



33. Write the following numbers in the Indian system of numeration: Six million five hundred forty three thousand two hundred ten. Seventy six million eighty five thousand nine hundred eighty seven. Three hundred twenty five million four hundred seventy nine thousand eight hundred thirty eight.



34. A certain nine digit number has only ones in ones period, only twos in the thousands period and only threes in millions period. Write this number in words in the Indian system.



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35. How many thousands make a million?



36. How many millions make a billion?

37. How many lakhs make a million? How many lakhs make a billion?

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38. Write each of the following in numeral form: Eight million seven hundred eight thousand four. Six hundred seven million twelve thousand eighty four. Four billion twenty five million forty five thousand.

39. Write the number names of each of the following

in international system of numeration: 435,002 (ii) 5,059,064,523 (iv)

25,201,905



40. How many 5-digit numbers are there in all?



41. How many 7-digit numbers are there in all?

42. Write the smallest 5-digit number having three different digits.

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43. Write the smallest 7-digit number having four different digits.

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44. Write the greatest 7-digit number having three

different digits.



45. Write the greatest 7-digit number having three

different digits.



46. How many four digit numbers are there in all?



47. Write the smallest and the largest six digit numbers. How many numbers are between these tow.





50. What is the smallest 3-digit number with unique

digits?



51. What is the largest 5-digit number with unique

digits?



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52. Write the smallest 3-digit number which does not

change if the digit are written in reverse order.



53. Find the difference between the number 279 and

that obtained on reversing its digits.



54. Form the largest and smallest 4-digit numbers

using each of digits 7, 1, 0, 5 only once.

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55. Which is greater 24, 37, 58,923 or 6,47,89,235?

56. Which is greater 75,38,254, or 74,59,789?

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57. Arrange the following numbers in ascending order: 8,42,73,952; 72,35,598; 9,45,872; 7,82,58,354; 97,32,589; 8,95,385.

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58. Arrange the following numbers in descending order: 2,43,758; 24,32,756; 2,89,653; 27,54,38,952; 22,98,654; 28,65,32,123



59. Put the appropriate symbol (<, >) in each of the

following boxes: 102394 () 99887 2507324

() 2517324 3572014 () 10253104 47983505 (

) 47894012

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60. Arrange the following numbers in ascending order: 102345694, 8354208, 6539542, 63547201, 12345678 1808090, 1808088, 181888, 190909, 16060666

61. Arrange the following numbers in descending order: 56943300, 56943201, 5695440, 56944000, 5694437 1020216, 1020308, 1021430, 893245, 893425



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62. Kirti Bookstores sold books worth Rs. 2,85,891 in the first week of June. The bookstore sold books worth Rs. 4,00,768 in the second week of the month. How much was the sale for the two weeks together? In which week was the sale greater? By how much?



63. In one state the number of bicycles sold in the year 2002-2003 was 7,42,214. In the year 2003-2004, the number of bicycles sold was 8,00,112. In which year were more bicycles sold? And how many more?



64. Find the difference between the greatest and least

numbers that can be written using the digits 6, 2, 7, 4,

3 each only once.



65. A student multiplied 7236 by 65 instead of multiplying by 56. How much was his answer greater than the correct answer?



66. The number of sheets of paper available for making notebooks is 75000. Each sheet makes 8 pages of a notebook. Each notebook contains 200 pages. How many notebooks can be made from the paper available.



67. How many milligrams makes one kilogram?



69. Population of Sundarnagar was 2,35,471 in the year

1991. In the year 2001 it was found to have increased
by 72,958. What was the population of the city in

2001?



70. A book exhibition was held for four days in a school. The number of tickets sold at the counter on the first, second, third and final days were respectively 1094, 1812, 2050 and 2751. Find the total number of tickets sold on all the four days.



71. The town newspaper is published everyday. One copy has 12 pages. Everyday 11,980 copies are printed. How many pages are in all printed Every day? Every month?



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72. A machine, on an average, manufacturers 2825 screws a day. How many screws did it produce in the month of January 2006?

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73. A famous cricket player has so far scored 6978 runs

in test matches. He wishes to complete 10,000 runs.

How many more runs does he need?

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74. Ravish has Rs. 78,592 with him. He placed an order for purchasing 39 radio sets at Rs. 1234 each. How much money will remain with him after the purchase?



75. In an election, the successful candidate registered 5,77,570 votes and his nearest rival secured 3,48,685 votes. By what margin did the successful candidate win the election?



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76. To stitch a shirt 2m 15cm cloth is needed. Out of 40m cloth, how many shirts can be stitched and how much cloth will remain?

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77. A vessel has 4 litre and 650ml of curd. In how many

glasses, each of 25ml capacity, can it be distributed?



78. Medicine is packed in boxes, each such box weighing 4kg 500 g. How many such boxes can be loaded in a van which cannot carry beyond 800 kg?



79. The distance between the school and the house of

a student is 1km 875m. Everyday she walks both ways

between her school and home. Find the total distance

covered by her in a week.

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80. Round off each of the following numbers to the nearest tens: 87 (ii 92 (iii) 854 (iv) 986										
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81. Round off each of the following numbers to the										
nearest tens: 999 (ii) 9,999 (iii) 10,003										
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82. Round off each of the following numbers to nearest hundreds. 5839 (ii) 9472 (iii) 7456

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83. Write the smallest and greatest numbers which are

when rounded off to nearest hundred become equal to 300.



84. Round off each of the following numbers to the

nearest thousand: 14329 (ii) 14729 (iii)



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87. Round off each of the following numbers to									
nearest tens: 84 (ii) 98 (iii) 984 (iv) 808									
Vatch Video Solution									
88. Round off each of the following numbers to									
nearest hundreds: 3,985 (ii) 7,289 (iii)									
8,074 (iv) 14,627									
Vatch Video Solution									

89. Round off each of the following numbers to
nearest hundreds: 28,826 (ii) 4,20,387
43,68,973 (iv) 7,42,898



91. Round off each of the following numbers to the nearest thousands: 9,567 (ii) 26,019 (iii) 20,963 (iv) 4,36,952

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92. Round off each of the following to the nearest tens, hundreds and thousands: 964 (ii) 1,049 (iii) 45,634 (iv) 79,085

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93. Round off the following measures to the nearest hundreds: Rs. 666 (ii) Rs. 850 (iii) Rs.

3,428



94. Round off the following measures to the nearest

hundreds: Rs. 9, 080 (ii) 1,265 (iii) 417m



95. Round off the following measures to the nearest

hundreds: 550*cm* (ii) 2,486 (iii) 360*gm*



96. Round off the following measures to the nearest

hundreds: 940kg (ii) 273l (iii) 820~mg

97. List all numbers which are rounded off to nearest

ten as 370.

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98. Find the smallest and greatest numbers which are

rounded off to the nearest hundreds as 900.

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99. Find the smallest and greatest numbers which are

rounded off to the nearest thousand as 9000.



100. Estimate the sum 5290 + 17986 by estimating the

numbers to their nearest

(i) hundreds

(ii) thousands.

A. (i)23300

(ii)23000

B. (i)23900

(ii)25000

C. (i)23870

(ii)23900

D. (i)23700

(ii)26000

Answer: A

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101. Estimate: 5,673 - 436 by rounding off the numbers to their greatest places (nearest hundreds). Also, find the reasonable estimate.

A. 5900

B. 5300

C. 6000

D.5500

Answer: B

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102. Subtract and estimate 489342 - 48365.

A. 4, 41, 000

B. 4, 41, 0070

C. 4, 48, 000

D. 5, 41, 000

Answer: A



103. Multiply and then Estimate the product to nearest thousands: 958×387 by rounding off each factor to its greatest place.

A. 3, 71, 890

B. 3, 71, 000

C.3, 91, 000

D.4, 71,000

Answer: B



104. Find the estimated quotient $2838 \div 125$ by rounding off the numerator and denominator to the nearest hundreds.



105. Estimate the following by rounding off each factor to nearest hundreds: 730 + 998 (ii) 796 - 314 (iii) 875 - 384

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106. Estimate the following by rounding off each factor to nearest thousands: 12,904 + 2,888 (ii) 28,292 - 21,496

A. 16000

800

B.16000

7000

C. 16000

7800

 $D.\,15000$

8200



107. Estimate the following by rounding off each number to its greatest place:

(i) 439 + 334 + 4, 317

(ii) 8,325 - 491

A. (i)4700

(ii)7500

B. (i)4500

(ii)7900

C. (i)6700

(ii)4500

D. (i)4760

(ii)1500

Answer: A

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108. Estimate the following by rounding off each number to its greatest place: 1, 08, 734 - 47, 599 (ii) 898×785

109. Estimate the following by rounding off each number to its greatest place:

(i) 9×795

(ii) 87 imes 317

A. 7300

25000

B.703

18000

C. 7000

28000

D. 7090

29000

Answer: C

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110. Find the estimated quotient for each of the following by rounding off each number to its greatest place: $878 \div 28$ (ii) $745 \div 24$ (iii) $4489 \div 394$



111. Write the expression for each of the following statements using brackets: Six multiplied by the sum of nine and four. The sum of four and six is multiplied by fifteen Divide the difference of eighteen and six by four. Fifty four divided by three times the sum of two and four.

112. Write two difference situations for $(7+8) \ x \ 15$.

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113. Simplify each of the following expression:

(i) 8 imes (3+7)(ii) (7-2) imes(12+8)(iii) 23+9 imes(6-3)-20A. (i)80 (ii)100 (iii)**3**0 B. (i)80 (ii)80 (iii)35

C. (i)800

(ii)10

(iii)30

D. (i)80

(ii)105

(iii)50

Answer: A



114. Write the expression for each of the following statements using brackets: Four multiplied by the

sum of 13 and 7. Eight multiplied by the difference of four from nine. Divide the difference of twenty eight and seven by 3. The sum of 3 and 7 in multiplied by the difference of twelve and eight.



115. Simplify each of the following: (i) $124 - (12 - 2) \cdot 9(ii)(13+7) * (9-4) -18$ (iii) `210-(14-4) * (18+2) - 10

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116. Simplify: 8 · 107



120. Simplify: 7 · 109



123. Simplify: 17 x 109



127. Simplify: $101 \ x \ 105$





131.	Write	the	Ro	oman	num	erals	for	each	of	the
follo	wing: 1	015			(ii)	1679		(i	ii)	1999
2359)	(\	/)	3786		(vi)	4592	2		



132. Write the Roman numerals for each of the following: 16464 (ii) 18985 (iii) 20349 (iv) 26495

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133. Write the following in Hindu-Arabic numerals: XXIX(ii) LXXXIX(iii)CLXV (iv)CCXXVIII(v)CDXLVI

134. Write the following in Hindu Arabic numerals: (i)DCXCVII (ii) KCIX (iii) KKKCDVI (iv) $C \ K \ X \ X \ I$ (V)







142. Write the corresponding Hindu-Arabic numerals for each of the following: (i)CIXÂ (ii) CLXXII (iii)CCLIV (iv) CCCXXIX


143. Write the following in Hindu-Arabic numerals:

(i) $\overline{IV}CDXLIV$

- (ii) $\overline{VI}CKXLIX$
- (iii) $\overline{IX}CCCXCI$
- (iv) $\overline{LX}XIX$



144. Which of the following are meaningless? (i) "I I

ICCC"` (ii) KKKCCXI (iii) XD (iv) VC



145. The difference between the place value and face

value of 8 in 658742 is 0 (b) 42 (c) 735

(d) 693

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146. The difference between the place values of 6 and

3 in 256839 is 3 (b) 9 6800 (d)

5930

147. The difference of the smallest three digit numberand the largest two digit number is: 100 (b) 1(c) 10 (d) 99

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148. The largest three digit number formed by the digit 8, 5, 9 is (a) 859 (b) 985 (c) 958 (d) 589

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149. The smallest three digit number having three distinct digits is (a) 123 (b) 101 (c) 102



152. The product of the place values of two threes in 53432 is 9000 (b) 90000 (c) 10000 (d) 99000



153. The smallest counting number is (i)0(b)1
(c)10(d)None of these
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155. The number of 3 digit numbers formed by using digits 3, 5, 9, taking each digit exactly once, is 3(b) 4 (c) 5 (c) 6

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156. Total number of numbers which when rounded off

to nearest ten give us 200 is 9 (b) 10 (c) 8



159. The difference between the greatest and smallest numbers which when rounded off a number to the nearest tens as 540, is (a) 10 (b) 9 (c) 8

(d) 10

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160. The difference between the greatest and smallest numbers which when rounded off a number to the nearest hundred as 6700, is (a) 100 (b) 99 (c) 98 (d) 101

161. The difference between the greatest and the smallest numbers which when rounded off to the nearest thousand as 9000, is (a) 1000 (b) 990

(c) 999 (d) 900

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162. Which of the following numbers is equal to 1

billion? (a) 10 lakh (b) 1 crore (c) 10 crore

(d) 100 crore



163. In the international place value system, we write one million for (a) 1 lakh (b) 10 lakh (c) 100 lakh (d) 1 crore Watch Video Solution **164.** Which of the following is not meaningful? (a) XIV (b) XXXV (c) XXV (d) VX Watch Video Solution **165.** Which of the following is not meaningful? (a) XXIII (b) XII (c) XVV (d) XIV



100 (b) 10 (c) 1000 (d) None of these





173. How many times does the digit 9 occur between 1

and 100?

174. 2985 is rounded off to the nearest hundred and the nearest tens. The difference between the two values is (a) 5 (b) 100 (c) 10 (d) 150



175. Write each of the following numerals in Indian

system of numeration: (i) 27943 (ii) 823514

(iii) 7421932 (iv) 53428769

176. Write each of the following numerals inInternationalsystem of numeration: (i)83254(ii) 457923 (iii) 2543876 (iv)

700430084

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177. Estimate the sum (4505 + 27807 + 21397) to the

nearest thousand.



178. Estimate the product $475 \ x \ 225$ rounding off each

number to the nearest hundred.



179. Write each of the following in Hindu-Arabic numeral:

(i) CCXXIV

(ii) CCCLXV

(iii) DCCLXVI

A. (i)284

(ii) 265

(iii) 734

B. (i)224

(ii) 365

(iii) 766

C. (i)124

(ii) 565

(iii) 766

D. (i)924

(ii) 365

(iii) 756

Answer: B



180. Write the greatest and the smallest numbers of 4 digits that can be formed using the digits 0, 8, 7, 5; using each digit only once.

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181. Write all natural numbers between 500 and 600

which do not change if the digits are written in the

reverse order.





numbers having four difference digits.



183. In two digit numbers, how many times does the

digit 5 occur in (i)the ten's place (ii)the units place?



184. Write the greatest 6-digit number formed by three different digits.



185. Fill in the blanks: 1 billion = million

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186. 1 billion = crore
Vatch Video Solution
187. The smallest four digit number with four different

digits is



188. 1 crore = million.

