

Exercise 1A

1.

Solutions

(i)The numeral form of nine thousand eighteen is: 9018

(ii) The numeral form of fifty four thousand seventy-three is 54073

(iii)The numeral form of three lakh two thousand five hundred six is: 302506

(iv)The numeral form of twenty lakh ten thousand eight is: 2010008

(v)The numeral form of six crore five lakh fifty-seven is: 60500057

(vi)The numeral form of two crore two lakh two thousand two hundred two is: 20202202

(vii)The numeral form of twelve crore twelve lakh twelve thousand twelve is: 121212012

(viii)The numeral form of fifteen crore fifty lakh twenty thousand sixty-eight is: 155020068

2.

Solutions

(i)The given number is 63,005

It is written as sixty three thousand and five

(ii)The given number is 7,07,075

It is written as seven lakh seven thousand and seventy five

(iii)The given number is 34, 20,019

It is written as thirty four lakh twenty thousand and nineteen

(iv)The given number is 3,05,09,012

It is written as three crore five lakh nine thousand and twelve

(v)The given number is 5,10,03,604

It is written as five crore ten lakh three thousand six hundred and four

(vi)The given number is 6,18,05,008

It is written as six crore eighteen lakh five thousand and eight

(vii)The given number is 19,09,09,900

It is written as nineteen crore nine lakh nine thousand and nine hundred

(viii)The given number is 6,15,30,807

It is written as six crore fifteen lakh thirty thousand eight hundred and seven

(ix)The given number is 6,60,60,060

It is written as six crore sixty lakh sixty thousand and sixty

3.



Solutions

(i)The given number is 15,768

The expanded form of $15,768 = (1 \times 10000) + (5 \times 1000) + (7 \times 100) + (6 \times 10) + (8 \times 1)$

(ii)The given number is 3,08,927

The expanded form of $3,08,927 = (3\times100000) + (8\times1000) + (9\times100) + (2\times10) + (7\times1)$

(iii)The given number is 24,05,609

The expanded form of $24,05,609 = (2 \times 1000000) + (4 \times 100000) + (5 \times 1000) + (6 \times 100) + (9 \times 1)$

(iv)The given number is 5,36,18,493

The expanded form of

 $5,36,18,493 = (5 \times 10000000) + (3 \times 1000000) + (6 \times 100000) + (1 \times 10000) + (8 \times 1000) + (4 \times 100) + (9 \times 10) + (3 \times 1)$

(v)The given number is 6,06,06,006

(vi)The given number is 9,10,10,510

The expanded form of $9,10,10,510 = (9 \times 10000000) + (1 \times 1000000) + (1 \times 100000) + (5 \times 100) + (1 \times 10)$

4.

Solutions

(i) The given expanded form is $6 \times 10000 + 2 \times 1000 + 5 \times 100 + 8 \times 10 + 4 \times 1$

The numeral number is 62584

(ii) The given expanded form is $5 \times 100000 + 8 \times 10000 + 1 \times 1000 + 6 \times 100 + 2 \times 10 + 3 \times 1$

The numeral number is 581623

(iii)The given expanded form is 2 × 10000000 + 5 × 100000 + 7 × 1000 + 9 × 100 + 5 × 1

The numeral number is 20507905

(iv)The given expanded form is 3 × 1000000 + 4 × 100000 + 6 × 1000 + 5 × 100 + 7 × 1

The numeral number is 3406507

5.

Solution

The given number is 79520986

Here the place value of nine at lakhs is 9000000 and the place value of nine at hundreds is 900

Therefore required difference is 9000000 – 900 = 8999100

6.

Solution



The given number is 27650934

Here the place value of 7 in 27650934 is 70 lakhs = 70,00,000

The face value of 7 in 27650934 is 7

Therefore required difference is 70,00,000 - 7 = 69,99,993

7.

Solution

The largest 6-digit number is 999999

The smallest 6-digit number is 100000

Therefore total number of 6-digit numbers = (999999-100000) + 1

=899999 + 1

=900000

=9 lakhs

8.

Solution

The largest 7-digit number is 9999999

The smallest 7-digit number is 1000000

Therefore total number of 7-digit numbers = (9999999-1000000) + 1

=8999999+1

=9000000

=Ninety lakhs

9.

Solution

1 lakh means 1,00,000 which is equal to one hundred thousand

Therefore $1,00,000 = (100 \times 1000)$

Hence one hundred thousand make a lakh

10.

Solution

One crore=1,00,00,000 which is equal to one hundred lakh

Therefore 1,00,00,000=(10,000×1000)

Hence ten thousand thousands make a crore



Exercise 1B

Page no: 8

1.

Solution

1003467 > 987965

2.

Solution

3572014 < 10235401

3.

Solution

3254790 < 3260152

4.

Solution

10357690 < 11243567

5.

Solution

27596381 > 7965412

6.

Solution

47893501< 47894021

7.

Solutions

Here 102345680 is a 9-digit number

63521047 and 63514759 are both 8-digit numbers in which the same numbers namely 6,3, and 5 are placed at crores, ten lakhs and lakhs place respectively whereas 2 and 1 are placed at ten thousands place

Since 2 > 1

Therefore 63521047 > 63514759

7354206 and 7355014 are both 7-digits numbers

Here the same numbers 7, 3 and 5 are placed at ten lakhs, lakhs and ten thousands place respectively whereas 5 and 4 are placed at thousands place

Since 5 > 4

Therefore 7355014 > 7354206



The given numbers in the descending order are:

102345680 > 63521047 > 63514759 > 7355014 > 7354206

8.

Solution

Here 23794206 and 23756819 are both 8-digits numbers in which the same numbers 2,3 and 7 are placed crores, ten lakhs and lakhs places respectively whereas 9 and 5 are placed at ten thousands place respectively.

Since 9 > 5

Therefore 23794206 > 23756819

Here 5032786 and 5032790 are both 7-digits numbers in which the same numbers 5,0,3,2 and 7 are

Placed at ten lakhs, lakhs, ten thousands, thousands and hundreds places respectively whereas 9 and 8 are placed at tens place respectively.

Since 9 > 8

Therefore 5032790 > 5032786

987876 is a 6-digits number

The given numbers in the descending order are:

23794206 > 23756819 > 5032790 > 5032786 > 987876

9.

Solution

Here 16060666 and 16007777 are 8-digits numbers in which the same numbers 1, 6 and 0 are placed at crores, ten lakhs and lakhs respectively whereas 6 and 0 are placed at ten thousands place respectively

Since 6 > 0

Therefore 16060666 > 16007777

1808088 and 1808090 are both 7-digits numbers in which the same numbers 1, 8, 0, 8 and o are placed at ten lakhs, lakhs, ten thousands, thousands and hundreds places respectively whereas 9 and 8 are placed at tens place respectively

Since 9 > 8

Therefore 1808090 > 1808088

190909 and 181888 are both 6-digits numbers

In both the numbers the same digit 1 is at lakhs place and the digits at ten thousands place are 9 and 8

Since 9 > 8

Therefore 190909 > 181888

The given numbers in the descending order are:

16060666 > 16007777 > 1808090 > 1808088 > 190909 > 181888

10.



Solution

Here 1712040, 1704382 and 1702497 are all 7-digits numbers in which the same numbers 1 and 7 are placed at ten lakhs and lakhs places respectively whereas the digits in ten thousands place are 1, 0 and 0

Hence 1712040 is the largest number and the digits in the remaining two numbers at thousands place are 4 and 2

Since 4 > 2

Therefore 1704382 > 1702497

201200, 200175 and 199988 are 6-digits numbers in which 2 and 1 are at lakhs place respectively

Since 2 is greater than 1

Therefore 201200 > 200175

Thus 199988 is the smallest number

The given numbers in the descending order are:

1712040 > 1704382 > 1702497 > 201200 > 200175 > 199988

11.

Solution

9873426 and 9874012 are both 7-digits numbers in which the same numbers 9, 8 and 7 are placed at ten lakhs, lakhs and ten thousands places respectively and the digits 3 and 4 are placed at thousands places

Since 3 < 4

Hence 9873426 < 9874012

24615019 and 24620010 are both 8-digits numbers in which the same numbers 2, 4 and 6 are placed at crores, ten lakhs and lakhs respectively, since 2 and 1 are at ten thousands place

Hence 24615019 < 24620010

The given numbers in ascending order are:

990357 < 9873426 < 9874012 < 24615019 < 24620010

12.

Solution

5694437 and 5695440 are both 7-digits numbers in which the same numbers 5, 6 and 9 are placed at ten lakhs lakhs and ten thousands places respectively and the digits 4 and 5 are at thousand places

Since 4 < 5

Hence 5694437 < 5695440

56943201, 56943300 and 56944000 are all 8-digits numbers

The same numbers 5, 6, 9 and 4 are placed at crores, ten lakhs, lakhs and ten thousands place

The digits 3 and 4 are at thousands place

Since 3 < 4



56943300 < 56944000

The digits 2 and 3 are at hundreds place

Since 2 < 3

56943201 < 56943300

The given numbers in ascending order are:

5694437 < 5695440 < 56943201 < 56943300 < 56944000

13.

Solution

700087 is 6-digit number

8014257, 8015032 and 8014306 are all 7-digit numbers

The same numbers 8, 0 and 1 are placed at ten lakhs, lakhs and ten thousands place respectively

At thousands place one number has 5 while the other two numbers have 4

Hence 8015032 is the largest number

The digits 2 and 3 are at hundreds place in the remaining two numbers

Hence 8014257 < 8014306

10012458 is an 8 digit number

The given numbers in ascending order are:

700087 < 8014257 < 8014306 < 8015032 < 10012458

14.

Solution

893245, 893425 and 980134 are 6-digits number

980134 is the largest number

The same numbers in the remaining two numbers are 8, 9 and 3 are placed at lakhs, ten thousands and thousands places respectively and the digits 2 and 4 are at hundreds place

Hence 893245 < 893425

1020304, 1021403 and 1020216 are all 7-digits number

Since they have the same digits at ten lakhs, lakhs and ten thousand places namely 1,0 and 2 respectively

1021403 has 1 at thousand places and the remaining two numbers have the digits at hundred places namely 2 and 3

Since 2 < 3

∴ 1020216 < 1020304</p>

Hence, the given numbers in ascending order are

893245 < 893425 < 980134 < 1020216 < 1020304 < 1021403



Exercise 1C Page no: 11

1

Solution

Persons visited the shrine in first year = 13789509

Persons visited the shrine in second year = 12976498

Therefore number of persons visited the shrine in these two years = 13789509+12976498

=26766007

2.

Solution

Number of sugar bags produced by first factory in last year = 24809565

Number of sugar bags produced by second factory in last year = 18738576

Number of sugar bags produced by third factory in last year = 9564568

::Total number of sugar bags produced by three factories during last year

= 24809565 + 18738576 + 9564568

= 53112709

3.

Solution

Given numbers are 37684955 and 3615045

∴Sum of both the numbers = 37684955 + 3615045

= 41300000

4.

Solution

Number of votes received by three candidates = 687905 + 495086 + 93756 = 1276747

Number of invalid votes = 13849

Number of persons who did not vote = 25467

:Total number of registered votes = 1276747 + 13849 + 25467

= 1316063

5.

Solution

People having primary education = 1623564

People having secondary education = 9768678



People having higher education = 6837954

People who are illiterate = 2684536

Children below the age of school admission = 698781

:Total population in the state = 1623564 + 9768678 + 6837954 + 2684536 + 698781

= 21613513

6.

Solution

Number of bicycles produced in first year = 8765435

Number of bicycles produced in second year = 8765435 + 1378689

= 10144124

Total number of bicycles produced during these two years = 8765435 + 10144124

= 18909559

7.

Solution

Company sale receipts in first year = ₹20956480

Company sale receipts in second year = ₹ 20956480 + ₹ 6709570

= ₹ 27666050

Total number of company sale receipts during these two years = ₹ 20956480 + ₹ 27666050

= ₹ 48622530

8.

Solution

Total number of population in the city = 28756304

Total number of males in the city = 16987059

Hence number of females in the city = 28756304 - 16987059

= 11769245

9.

Solution

Given numbers are 13246510 and 4658642

Required number = 13246510 - 4658642

= 8587868

Hence 13246510 is larger than 4658642 by the number 8587868

10.

Solution



Given number is 5643879

Required number=1 crore - 5643879

=10000000 - 5643879

=4356121

Hence the number 5643879 is smaller than one crore by the number 4356121

11.

Solution

Given number = 11010101

Required number = 2635967

11010101 - Required number = 2635967

Required number = 11010101 - 2635967

=8374134

Hence the number 8374134 must be subtracted from 11010101 to get 2635967

12.

Solution

The sum of two numbers = 10750308

Given number = 8967519

Other number = 10750308 - 8967519

=1782789

Hence 1782789 is the other number

13.

Solution/

Money already having with him = ₹ 20000000

Money spent on buying a school building = ₹13607085

Total amount of money left = ₹ 20000000 – ₹ 13607085

=6392915

Therefore total amount of money left with him is ₹ 6392915

14.

Solution

Money needed by the society to buy a property = ₹ 18536000

Amount collected as membership fee = ₹ 7253840

Amount taken as loan from bank = ₹ 5675450

Amount collected as donation from bank = ₹ 2937680



Total amount short = ₹ 18536000 – (₹ 7253840 + ₹ 5675450 + ₹ 2937680)

= ₹ 18536000 – ₹ 15866970

= ₹ 2669030

Hence total amount short = ₹ 2669030

15.

Solution

Amount already with him = ₹ 10672540

Amount given to his wife = ₹ 4836980

Amount given to his son = ₹ 3964790

Amount received by the daughter = ₹ 10672540 - (₹ 4836980 + ₹ 3964790)

= ₹ 10672540 – ₹ 8801770

= ₹ 1870770

Hence total amount received by the daughter is ₹ 1870770



Exercise 1D

1.

Solution

(a) 36

Here 6 is in once digits place

6 > 5

∴ required rounded number is 40

(b) 173

Here 3 is in once digits place

3 < 5

∴ required rounded number is 170

(c) 3869

Here 9 is in once digits place

9 > 5

∴ required rounded number is 3870

(d) 16378

Here 8 is in once digits place

8 > 5

∴ required rounded number is 16380

2.

Solution

(a) 814

Here tens digits place is 1

1 < 5

∴ required rounded number is 800

(b) 1254

Here tens digits place is 5

5=5

∴ required rounded number is 1300

(c) 43126

Here tens digits place is 2

2 < 5

∴ required rounded number is 43100



(d) 98165

Here tens digits place is 6

6 > 5

∴ required rounded number is 98200

3.

Solution

(a) Here 7 is in hundred digits place

7 > 5

∴ required rounded number is 1000

(b) Here 8 is in hundred digits place

8 > 5

∴ required rounded number is 5000

(c)Here 7 is in hundred digits place

7 > 5

∴ required rounded number is 17000

(d) Here 3 is in hundred digits place

3 < 5

∴ required rounded number is 28000

4.

Solution

(a) Thousand digits number is 7 > 5

∴ required rounded number is 20000

(b) Thousand digits number is 6 > 5

.. required rounded number is 30000

(c)Thousand digit number is 4 < 5

.. required rounded number is 30000

(d) Thousand digit number is 2 < 5

: required rounded number is 270000

5.

Solution

Estimated value to the nearest ten of 57 = 60



Estimated value to the nearest ten of 34 = 30 Total required estimation = (60 + 30) = 90

6.

Solution

Estimated value to the nearest ten of 43 = 40Estimated value to the nearest ten of 78 = 80Total required estimation = (40 + 80) = 1207.

Solution

Estimated value to the nearest ten of 14 = 10Estimated value to the nearest ten of 69 = 70Total required estimation = (10 + 70) = 808.

Solution

Estimated value to the nearest ten of 86 = 90Estimated value to the nearest ten of 19 = 20Total required estimation = (90 + 20) = 1109.

Solution

Estimated value to the nearest ten of 95 = 100Estimated value to the nearest ten of 58 = 60Total required estimation = (100 + 60) = 160

Solution

Estimated value to the nearest ten of 77 = 80 Estimated value to the nearest ten of 63 = 60 Total required estimation = (80 +60) = 140 11.

Solution

Estimated value to the nearest ten of 356 = 360Estimated value to the nearest ten of 275 = 280Total required estimation = (360 + 280) = 640



12.

Solution

Estimated value to the nearest ten of 463 = 460Estimated value to the nearest ten of 182 = 180Total required estimation = (460 + 180) = 64013.

Solution

Estimated value to the nearest ten of 538 = 540Estimated value to the nearest ten of 276 = 280Total required estimation = (540 + 280) = 820

14.

Solution

Estimated value to the nearest hundreds of 236 = 200
Estimated value to the nearest hundreds of 689 = 700
Total required estimation = (200 +700)
=900

15.

Solution

Estimated value to the nearest hundreds of 458 = 500
Estimated value to the nearest hundreds of 324 = 300
Total required estimation = (500 + 300)
= 800

16.

Solution

Estimated value to the nearest hundreds of 170 =200
Estimated value to the nearest hundreds of 395 = 400
Total required estimation = (200 + 400) = 600

17.

Solution

Estimated value to the nearest hundreds of 3280 = 3300Estimated value to the nearest hundreds of 4395 = 4400Total required estimation = (3300 + 4400) = 7700



18.

Solution

Estimated value to the nearest hundreds of 5130 = 5100

Estimated value to the nearest hundreds of 1410 = 1400

Total required estimation = (5100 + 1400)

= 6500

19.

Solution

Estimated value to the nearest hundreds of 10083 = 10100

Estimated value to the nearest hundreds of 29380 = 29400

Total required estimation = (10100 + 29400) = 39500

Estimate each sum to the nearest thousand:

20.

Solution

Estimated value to the nearest thousands of 32836 = 33000

Estimated value to the nearest thousands of 16466 = 16000

Total required estimation = (33000 + 16000)= 49000

21.

Solution

Estimated value to the nearest thousands of 46703 = 47000

Estimated value to the nearest thousands of 11375 = 11000

Total required estimation = (47000 + 11000) = 58000

22.

Solution

Total number of balls in box A = 54

Total number of balls in box B = 79

Total number of estimation of balls in box A = 50

Total number of estimation of balls in box B = 80

Total number of estimation of balls in both the boxes = (50 + 80)

=130

23.

Solution



Estimated value to the nearest ten of 53 = 50

Estimated value to the nearest ten of 18 = 20

 \therefore required estimation = (50 - 20) = 30

24.

Solution

Estimated value to the nearest ten of 97 = 100

Estimated value to the nearest ten of 38 = 40

 \therefore required estimation = (100 - 40) = 60

25.

Solution

Estimated value to the nearest ten of 409 = 410

Estimated value to the nearest ten of 148 = 150

 \therefore required estimation = (410 – 150)= 260

26.

Solution

Estimated value to the nearest hundreds of 678 = 700

Estimated value to the nearest hundreds of 215 = 200

 \therefore required estimation = (700 - 200) = 500

27.

Solution

Estimated value to the nearest hundreds of 957 = 1000

Estimated value to the nearest hundreds of 578 = 600

 \therefore required estimation = (1000 - 600) = 400

28.

Solution

Estimated value to the nearest hundreds of 7258 =7300

Estimated value to the nearest hundreds of 2429 = 2400

 \therefore required estimation = (7300 - 2400) = 4900

29.

Solution

Estimated value to the nearest hundreds of 5612 = 5600

Estimated value to the nearest hundreds of 3095 = 3100



∴required estimation = (5600 – 3100) = 2500

30.

Solution

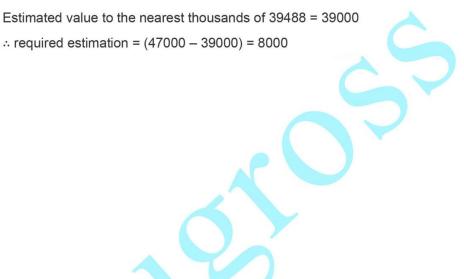
Estimated value to the nearest thousands of 35863 = 36000 Estimated value to the nearest thousands of 27677 = 28000

∴ required estimation = (36000 – 28000) = 8000

31.

Solution

Estimated value to the nearest thousands of 47005 = 47000





Exercise 1E

1.

Solution

Given

38 × 63

Estimated value to the nearest ten of 38 = 40

Estimated value to the nearest ten of 63 = 60

∴ required estimation = (40 × 60) = 2400

2.

Solution

Given

 54×47

Estimated value to the nearest ten of 54 = 50

Estimated value to the nearest ten of 47 = 50

∴ required estimation = (50 × 50) = 2500

3.

Solution

Given

28 × 63

Estimated value to the nearest ten of 28 = 30

Estimated value to the nearest ten of 63 = 60

∴ required estimation = (30 × 60) = 1800

4.

Solution

Given

42 × 75

Estimated value to the nearest ten of 42 = 40

Estimated value to the nearest ten of 75 = 80

∴ required estimation = (40 × 80)

= 3200

5.

Solution





Given

64 × 58

Estimated value to the nearest ten of 64 = 60

Estimated value to the nearest ten of 58 = 60

- ∴ required estimation = (60 × 60)
- = 3600

6.

Solution

Given

15 × 34

Estimated value to the nearest ten of 15 = 20

Estimated value to the nearest ten of 34 = 30

- ∴ required estimation = (20 × 30)
- = 600

7. Solution

Given

376 × 123

Estimated value to the nearest hundreds of 376 = 400

Estimated value to the nearest hundreds of 123 = 100

- ∴ required estimation = (400 × 100)
- = 40000

8.

Solution

Given

264 × 147

Estimated value to the nearest hundreds of 264 = 300

Estimated value to the nearest hundreds of 147 = 100

- ∴ required estimation = (300 × 100)
- = 30000

9.

Solution

Given



423 × 158

Estimated value to the nearest hundreds of 423 = 400

Estimated value to the nearest hundreds of 158 = 200

∴ required estimation = (400 × 200)

= 80000

10.

Solution

Given

509 × 179

Estimated value to the nearest hundreds of 509 = 500

Estimated value to the nearest hundreds of 179 = 200

∴ required estimation = (500 × 200)

= 100000





Exercise 1F

1.

Solution

The estimated quotient of $87 \div 28 = 90 \div 30 = 3$

2.

Solution

The estimated quotient of 83 \div 17 = 80 \div 20 = 4

3.

Solution

The estimated quotient of $75 \div 23 = 80 \div 20 = 4$

4.

Solution

The estimated quotient of $193 \div 24 = 200 \div 20 = 10$

5.

Solution

The estimated quotient of $725 \div 23 = 700 \div 20 = 35$



Exercise 1G

1.

Solutions

- (i) Roman number of 2 is written as II
- (ii) Roman number of 8 is written as (5 + 3) = VIII
- (iii) Roman number of 14 is written as (10 + 4) = XIV
- (iv) Roman number of 29 is written as (10 + 10 + 9) = XXIX
- (v) Roman number of 36 is written as (10 + 10 + 10 + 6) = XXXVI
- (vi) Roman number of 43 is written as (50 10) + 3 = XLIII
- (vii) Roman number of 54 is written as (50 + 4) = LIV
- (viii) Roman number of 61 is written as (50 + 10 + 1) = LXI
- (ix) Roman number of 73 is written as (50 + 10 + 10 + 3) =LXXIII
- (x) Roman number of 81 is written as (50 + 10 + 10 + 10 + 1) = LXXXI
- (xi) Roman number of 91 is written as (100 10) + 1 = XCI
- (xii) Roman number of 95 is written as (100 10) + 5 = XCV
- (xiii) Roman number of 99 is written as (100 10) + 9 = XCIX
- (xiv) Roman number of 105 is written as (100 + 5) = CV
- (xv) Roman number of 114 is written as (100 + 10) + 4 = CXIV

2.

Solutions

- (i) Roman numeral of 164 = (100 + 50 + 10 +4) = CLXIV
- (ii) Roman numeral of 195 = (100) + (100 10) + 5 = CXCV
- (iii) Roman numeral of 226 = (100 + 100 + 10 + 10 + 6) = CCXXVI
- (iv) Roman numeral of 341 = 100 + 100 + 100 + (50 10) + 1 = CCCXLI
- (v) Roman numeral of 475 = (500 10) + 50 + 10 + 10 + 5 = CDLXXV
- (vi) Roman numeral of 596 = 500 + (100 10) + 6 = DXCVI
- (vii) Roman numeral of 611 = 500 + 100 + 11 = DCXI
- (viii) Roman numeral of 759 = 500 + 100+ 100 + 50 + 9 = DCCLIX



Exercise 1H

1

Solution

Here the place value of 6 is 6 lakhs = $(6 \times 100000) = 600000$

Hence option (c) is the correct answer

2.

Solution

Here the face value remains same irrespective of its place in the place value chart.

Hence the face value of 4 will remain same

Hence (a) is correct answer

3.

Solution

Here place value of $5 = 5 \times 10000 = 50000$

Face value of 5 = 5

- : required difference = (place value face value)
- =50000-5
- = 49995

Hence option (c) is the correct answer

4.

Solution

The smallest counting number is 1

Hence option (b) is correct answer

5.

Solution

The largest 4-digit number = 9999

The smallest 4-digit number = 1000

Total number of 4-digit numbers = (9999-1000) + 1

- = 8999 + 1
- = 9000

Hence option (b) is correct answer