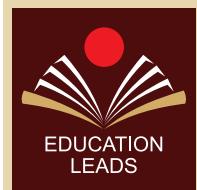




Accurate Mathematics

A Course Book in Mathematics with Activity

Written by :
S K Singhal



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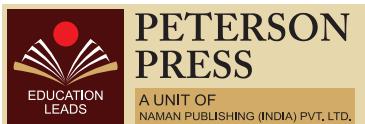
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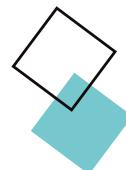
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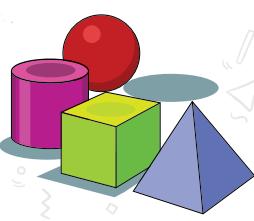
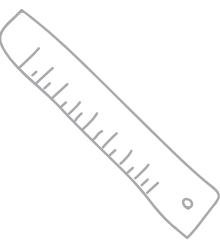
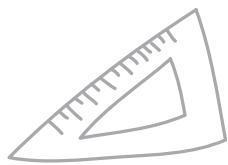
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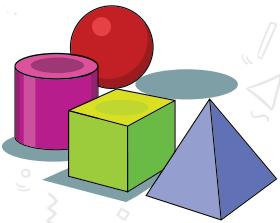
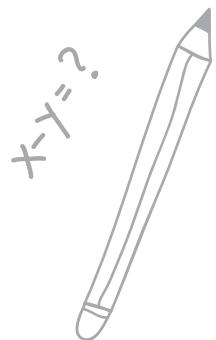
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1. Review



Exercise 1A

1. Write the consecutive numbers that come after.

- a. 886
b. 2505
c. 6783

2. Write in the expanded form.

- a. $2317 =$
b. $3247 =$
c. $7208 =$
d. $4050 =$

3. Write $>$, $<$ or $=$.

- a. 4580 2367 b. 3739 3793 c. 3265 4621 d. 7366 7636

4. Write in ascending order.

- a. 4674 3567 6040 7147 2268
b. 7975 7759 6643 8321 7530
c. 2200 2020 2002 3001 3010

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4. Fill in.

- a. In 254, the place value of 2 is _____, that of 4 is _____ and that of 5 is _____.
b. In 3906, the place value of 9 is _____, that of 3 is _____ and that of 6 is _____.
c. In 4567, the place value of 4 is _____, that of 6 is _____ and that of 5 is _____.
d. Write the numbers shown by the numerals: XI = _____ IX = _____ VII = _____.
e. Write in Roman numerals: 7 = _____ 10 = _____ 11 = _____.
f. The number name of 4203 is _____.
g. The number name of 8328 is _____.
h. Eight thousand six hundred and twenty-two in figures is _____.
i. Seven thousand thirty in figures is _____.

6. Make the greatest and the smallest numbers using all the digits.

Digits
Smallest number
Greatest number

a. 1, 6, 8	b. 2, 0, 7

c. 3, 4, 2, 5	d. 8, 0, 3, 2

7. Do these sums.

a.
$$\begin{array}{r} 3 & 8 & 9 & 4 \\ + 3 & 5 & 3 & 8 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 4 & 6 & 8 & 3 \\ + 1 & 8 & 7 & 0 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 5 & 7 & 8 & 2 \\ - 2 & 1 & 4 & 3 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 8 & 7 & 0 & 1 \\ - 7 & 6 & 5 & 4 \\ \hline \end{array}$$

8. a. $451 + 368 + 82$ b. $328 + 435 + 42 + 53$ c. $1207 + 334 + 169$ d. $3065 + 2650 + 341$

9. a. $683 + 702 - 515$ b. $743 - 168 - 417$ c. $589 - 671 + 82$ d. $3786 - 3723 + 1324$

10. a.
$$\begin{array}{r} 2 & 5 \\ \times 4 & 0 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 5 & 1 \\ \times 2 & 0 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 3 & 7 & 5 \\ \times 3 & 0 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 3 & 0 & 8 \\ \times 6 & 0 \\ \hline \end{array}$$

e.
$$\begin{array}{r} 2 & 2 \\ \times 3 & 0 & 0 \\ \hline \end{array}$$

11. a.
$$\begin{array}{r} 3 & 2 \\ \times 1 & 3 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 6 & 4 \\ \times 5 & 2 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 2 & 4 & 8 \\ \times 2 & 6 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 1 & 0 & 8 \\ \times 3 & 7 \\ \hline \end{array}$$

e.
$$\begin{array}{r} 5 & 3 & 2 \\ \times 4 & 2 \\ \hline \end{array}$$

12. Divide and check the answer.

a.
$$\begin{array}{|c|c|c|} \hline 2 & | & 3 & 6 \\ \hline \end{array}$$

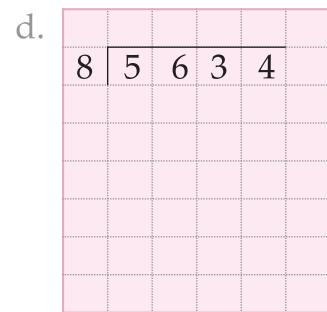
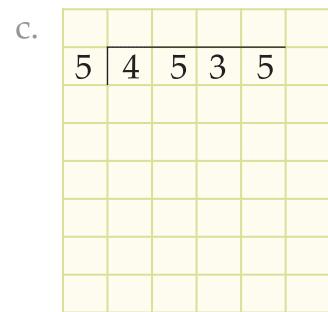
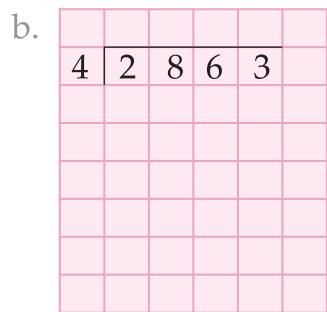
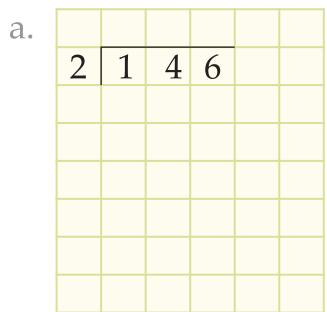
b.
$$\begin{array}{|c|c|c|} \hline 3 & | & 4 & 6 \\ \hline \end{array}$$

c.
$$\begin{array}{|c|c|c|} \hline 8 & | & 5 & 7 \\ \hline \end{array}$$

d.
$$\begin{array}{|c|c|c|} \hline 12 & | & 6 & 5 \\ \hline \end{array}$$

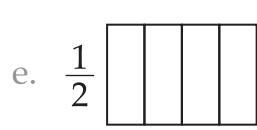
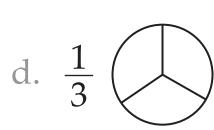
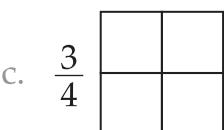
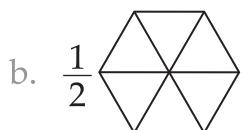
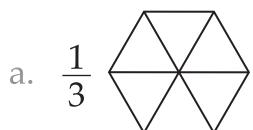
Dividend =
 $\underline{\quad} \times \underline{\quad} + \underline{\quad} =$

13. Divide.

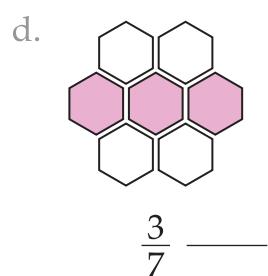
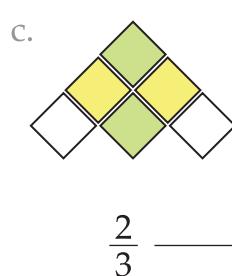
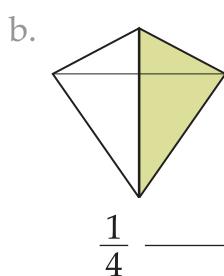
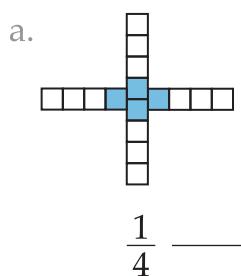


Exercise 1B

1. Colour to show the fractions.



2. Write 'T' if the fraction is shaded correctly. If not, write 'F'.



3. Write 'T' for true and 'F' for false.

a. A marble is a cone.

b. A brick is a cuboid.

c. A cylinder has 2 curved faces and one flat face.

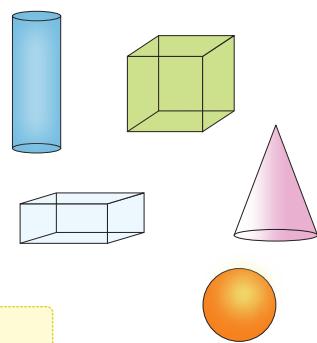
d. A cuboid has 6 faces.

e. All the edges of a cube are equal.

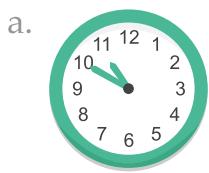
f. A circle has only one side.

g. The opposite sides of a rectangle are equal.

h. The part of a line between two points is called a line segment.



4. Write the time.



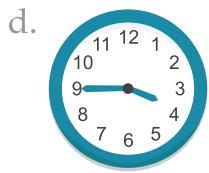
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5. Fill in.

- a. $25 \text{ p} = \text{Re } \underline{\hspace{2cm}}$ b. $\text{Rs } 15.50 = \underline{\hspace{2cm}} \text{ p}$ c. $3200 \text{ p} = \text{Rs } \underline{\hspace{2cm}}$ d. $8775 \text{ p} = \text{Rs } \underline{\hspace{2cm}}$
- e. $3 \text{ hours} = \underline{\hspace{2cm}} \text{ minutes}$ f. $2 \text{ days} = \underline{\hspace{2cm}} \text{ hours}$
- g. $4 \text{ weeks} = \underline{\hspace{2cm}} \text{ days}$ h. $3 \text{ months} = \underline{\hspace{2cm}} \text{ days}$
- i. $5 \text{ minutes} = \underline{\hspace{2cm}} \text{ seconds}$ j. $2 \text{ week} = \underline{\hspace{2cm}} \text{ hours}$
- k. $4 \text{ metres} = \underline{\hspace{2cm}} \text{ cm}$ l. $600 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$
- m. $3000 \text{ m} = \underline{\hspace{2cm}} \text{ km}$ n. $8 \text{ km} = \underline{\hspace{2cm}} \text{ m}$
- o. $6 \text{ kg} = \underline{\hspace{2cm}} \text{ grams}$ p. $4000 \text{ grams} = \underline{\hspace{2cm}} \text{ kg}$
- q. $2000 \text{ ml} = \underline{\hspace{2cm}} \text{ l}$ r. $3 \text{ l} = \underline{\hspace{2cm}} \text{ ml}$

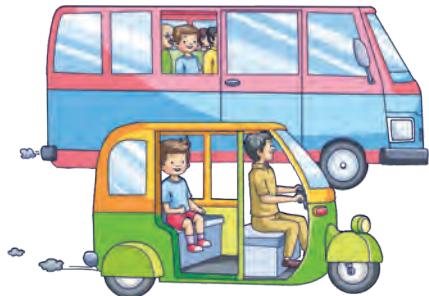
6. Change.

- a. $3 \text{ hours } 5 \text{ minutes to minutes}$
c. $5 \text{ months } 15 \text{ days to days}$
e. $3 \text{ l } 30 \text{ ml to ml}$
g. $4 \text{ kg } 500 \text{ g to grams}$
i. $7 \text{ m } 80 \text{ cm to centimetres}$
- b. $4 \text{ days } 10 \text{ hours to hours}$
d. $3 \text{ weeks } 2 \text{ days to days}$
f. $2543 \text{ ml to litres and millilitres}$
h. $4255 \text{ grams to kilograms and grams}$
j. $528 \text{ cm to metres and centimetres}$

7. Find.

- a. $\text{₹ } 22.50 + \text{₹ } 221.00$
c. $\text{₹ } 79.75 - \text{₹ } 27.50$
e. $\text{₹ } 35.45 \times 7$
g. $\text{₹ } 72.40 \div 8$
- b. $\text{₹ } 22.45 + \text{₹ } 239.65 + \text{₹ } 1237.75$
d. $\text{₹ } 8521 - \text{₹ } 1260.50$
f. $682 \text{ rupees } 75 \text{ paise} \times 6$
h. $369 \text{ rupees } 30 \text{ paise} \div 3$

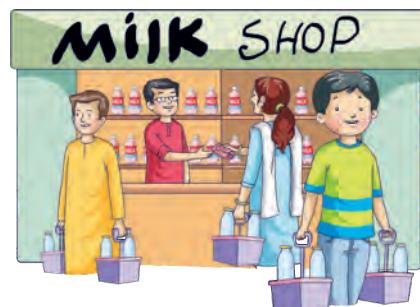
8. Mr. Gupta had 2 kg of potatoes, 1 kg 500 g of onions and 250 g of spinach in his shopping bag. What was the total weight of the vegetables in his bag?



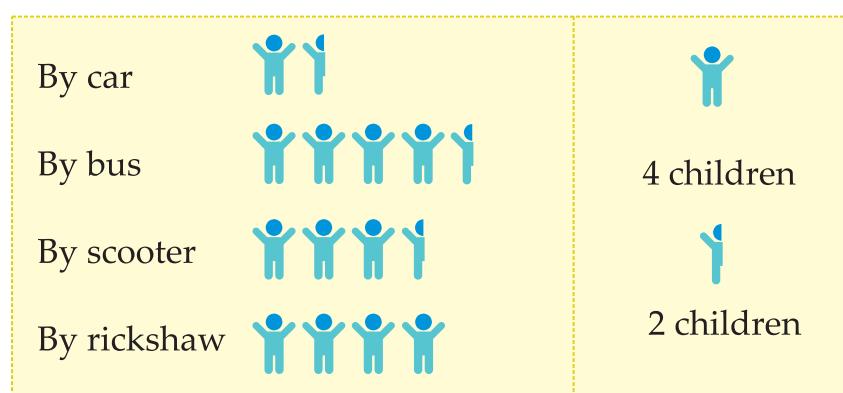
10. A shop sells 28 l 150 ml of milk every day. How much milk does it sell in 6 days?



9. Rohan went to a temple 45 km 600 m away. He travelled 43 km 500 m by bus and then took a auto-rickshaw. What distance did he travel by auto-rickshaw?



11. A tailor used 24 m 40 cm of cloth to make 8 trousers of equal size. What length of cloth did he use to make each?
12. This pictograph shows how the children of a class come to school. Look at it and fill in the blanks.



- a. The number of children who come by rickshaw = _____ and by car _____.
- b. The number of children who come by bus = _____ and by scooter = _____.
- c. The total number of children in the class = _____.

2. Roman Numerals

Hindu-Arabic Numerals

Numerals are used to represent numbers. We usually use the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9. The method of writing all numbers using ten numerals started in India. It was later spread around the world by the Arabs. So, these numerals are often called the **Hindu - Arabic numerals**.

Roman Numerals

The Romans used seven letters as numerals.

Roman numeral	I	V	X	L	C	D	M
Value	1	5	10	50	100	500	1000

Writing Numbers using Roman Numerals

- The numerals I, X, C and M (1, 10, 100 and 1000) are special. Only they can be placed together (repeated in a row) and only they can be subtracted.

- I, X, C and M can be repeated in a row up to three times to form larger numbers.
The values of the repeated numerals get added.

$$II = 1 + 1 = 2$$

$$III = 1 + 1 + 1 = 3$$

$$XXX = 10 + 10 + 10 = 30$$

$$CC = 100 + 100 = 200$$

$$CCC = 100 + 100 + 100 = 300$$

$$MM = 1000 + 1000 = 2000$$

- A smaller numeral gets added to the greater numeral on its left.

$$VI = 5 + 1 = 6$$

$$VII = 5 + 1 + 1 = 7$$

$$VIII = 5 + 1 + 1 + 1 = 8$$

$$XII = 10 + 1 + 1 = 12$$

$$XXV = 10 + 10 + 5 = 25$$

$$LX = 50 + 10 = 60$$

- A smaller numeral gets subtracted from the greater numeral on its right.
You can subtract only once from a numeral.

$$IV = 5 - 1 = 4$$

$$IX = 10 - 1 = 9$$

$$XL = 50 - 10 = 40$$

- A smaller numeral between two greater numerals gets subtracted from the numeral on its right.

$$XIV = 10 + 5 - 1 = 14$$

$$XIX = 10 + 10 - 1 = 19$$

40 is XL and not XXXX (more than 3 Xs together).
30 is XXX and not XXL (you can subtract only once from a numeral).



To change into Roman numerals, change the tens and ones separately.
49 = 40 and 9 = XL and IX = XLIX.



Numbers 1 to 50 in Roman Numerals.

1 I	2 II	3 III	4 IV	5 V	6 VI	7 VII	8 VIII	9 IX	10 X
11 XI	12 XII	13 XIII	14 XIV	15 XV	16 XVI	17 XVII	18 XVIII	19 XIX	20 XX
21 XXI	22 XXII	23 XXIII	24 XXIV	25 XXV	26 XXVI	27 XXVII	28 XXVIII	29 XXIX	30 XXX
31 XXXI	32 XXXII	33 XXXIII	34 XXXIV	35 XXXV	36 XXXVI	37 XXXVII	38 XXXVIII	39 XXXIX	40 XL
41 XLI	42 XLII	43 XLIII	44 XLIV	45 XLV	46 XLVI	47 XLVII	48 XLVIII	49 XLIX	50 L



Exercise 2A

1. Write using Hindu-Arabic numerals.

- a. III V IV IX X XI VII XII XIII XX
- b. XIV XVII XVI XIX XXI XXIII XXVI XXVII XXIX XXX
- c. XXXI XXXIII XXXIV XXXVII XXXV XL XLIII XLV XLIX L

2. Write using Roman numerals.

- a. 2 4 5 6 8 9 10 15 18 20
- b. 21 25 28 24 29 27 30 31 33 35
- c. 34 38 39 40 41 43 44 46 48 49

3. Fill in > or <.

a. VII  VI

b. IX  XI

c. XVI  XIV

d. XXX  CC

e. XXX  XL

f. XXXVI  XLVI

g. IX  XL

h. L  C

i. XLV  XXV

4. Fill in > or < or =.

a. XXII  12

b. $4 + 2$  XLII

c. $30 - 20$  X

d. XXXII  32

e. XL  $50 + 10$

f. 3×8  XLII

g. XXXVII  38

h. C  50

i. $20 + 6$  XXIV

5. Write in ascending order.

a.

XV	XXIV	IX	XLI	XXVI	XIV
----	------	----	-----	------	-----

--	--	--	--	--	--	--

b.

XXX	XX	X	L	C	XL
-----	----	---	---	---	----

--	--	--	--	--	--	--

c.

XXII	XIX	XXI	XI	XXX	XXVII
------	-----	-----	----	-----	-------

--	--	--	--	--	--	--

6. Write in descending order.

a.

XXX	L	XL	XIX	XVIII	XXIX
-----	---	----	-----	-------	------

--	--	--	--	--	--	--

b.

XLI	XXXIX	XIX	XLVI	XVI	XXVIII
-----	-------	-----	------	-----	--------

--	--	--	--	--	--	--

c.

XII	XIII	XXIX	XIX	IX	XI
-----	------	------	-----	----	----

--	--	--	--	--	--	--

7. Write the answers in Roman numerals.

a. $7 \times 5 =$

b. $72 \div 9 =$

c. $11 + 13 =$

d. $3 \times 8 =$

e. $49 - 19 =$

f. $17 + 8 =$

g. $5 \times 5 =$

h. $280 \div 10 =$

i. $8 \times 8 =$

3. Large Numbers

We come across large numbers every day. You might read that the population of a town is 458392. How do we say this number in words? How are such numbers formed?

You know that 1000 is the smallest 4 - digit number and 9999 is the greatest 4 - digit number. What comes after 9999?

$9999 + 1 = 10000$ (ten thousand).

10,000 is the smallest 5-digit number.

99,999 is the greatest 5-digit number.

What comes after 99,999?

$99999 + 1 = 100000$ (1 lakh or one hundred thousand).

100 thousands or 10 ten thousands make 1,00,000.

1,00,000 is the smallest 6-digit number.

9,99,999 is the greatest 6-digit number.

$999999 + 1 = 1000000$ (10 lakh or one million).

1000 thousands or 10 times one lakh make 10,00,000.

10,00,000 is the smallest 7-digit number.

9,99,999 is the greatest 7-digit number.

$9999999 + 1 = 10000000$ (1 crore or ten million).

100 lakhs make 1,00,00,000.

1,00,00,000 is the smallest 8-digit number.

9,99,99,999 is the greatest 8-digit number.

$1000 \times 10 = 10,000$ (4 zeros)
10 thousand

$10,000 \times 10 = 1,00,000$ (5 zeros)
10 thousand 1 lakh

$1,00,000 \times 10 = 10,00,000$ (6 zeros)
1 lakh 10 lakh

$10,00,000 \times 10 = 1,00,00,000$ (7 zeros)



Numbers in Expanded Form

$$4,678 = 4000 + 600 + 70 + 8$$

$$32,681 = 30000 + 2000 + 600 + 80 + 1$$

30 thousand

$$59,023 = 50000 + 9000 + 0 + 20 + 3$$

50 thousand

$$3,62,374 = 300000 + 60000 + 2000 + 300 + 70 + 4$$

3 lakh 60 thousand

$$2,03,456 = 200000 + 0 + 3000 + 400 + 50 + 6$$

2 lakh

$$6,40,809 = 600000 + 40000 + 0 + 800 + 0 + 9$$

6 lakh 40 thousand

$$72,84,958 = 7000000 + 200000 + 80000 + 4000 + 900 + 50 + 8$$

70 lakh 2 lakh 80 thousand

$$3,46,51,120 = 30000000 + 4000000 + 600000 + 50000 + 1000 + 100 + 20 + 0$$

3 crore 40 lakh 6 lakh 50 thousand



Place-value Chart

The place value chart is divided into the groups of places called periods. The ones period has three places: ones, tens and hundreds. All other periods have two places.

The number $5,64,32,198 = 50000000 + 6000000 + 400000 + 30000 + 2000 + 100 + 90 + 8$.

This is shown in the place-value chart below.

Crores period		Lakhs period		Thousands period		Ones period		
Ten crores (TC)	Crores (C)	Ten lakhs (TL)	Lakhs (L)	Ten thousands (TTh)	Thousands (Th)	Hundreds H	Tens (T)	Ones O
	5	6	4	3	2	1	9	8

The commas (or spaces) in numbers group the digits into periods.

The periods help to read the number.

$5,64,32,198 \rightarrow$ five crore sixty-four lakh thirty-two thousand one hundred and ninety-eight

Writing Large Numbers

Four lakh seven thousand five hundred and sixty-seven

Make period blocks and fill the places.
Keep all places before the leftmost digit blank.
For no value at a place, write zero.
Finally, write the number with commas
(or spaces) to show the periods.



1	TC	C	TL	L	TTh	Th	H	T	O

2	TC	C	TL	L	TTh	Th	H	T	O

3	TC	C	TL	L	TTh	Th	H	T	O

4	TC	C	TL	L	TTh	Th	H	T	O

5 $4,07,567$ or $4\ 07\ 567$

▪ Eighty-three thousand three hundred and seven

TC	C	TL	L	TTh	Th	H	T	O

$83,307$

▪ Fifty-five lakh one thousand five hundred and ten

TC	C	TL	L	TTh	Th	H	T	O

$55,01,510$

▪ Three crore ninety-nine thousand and eighteen

TC	C	TL	L	TTh	Th	H	T	O

$3,00,99,018$

Writing the Number Names of Large Numbers

- 52708456

Move right to left, marking the periods with commas.
The first period from the right has 3 digits. The rest have 2.
The numbers in the periods give the number name.



52708456 → 5,27,08,456

5,27,08,456 is five crore twenty-seven lakh eight thousand four hundred and fifty-six.



Exercise 3A

1. Write in the short form.

a. $50000 + 5000 + 500 + 50 + 5 =$

b. $600000 + 40000 + 2000 + 300 + 10 + 5 =$

c. $4000000 + 500000 + 30000 + 6000 + 700 + 80 + 9 =$

d. $30000000 + 5000000 + 600000 + 40000 + 2000 + 700 + 80 + 5 =$

e. $80000000 + 7000000 + 600000 + 50000 + 0 + 300 + 20 + 8 =$

f. $7000000 + 500000 + 80000 + 0 + 200 + 40 + 6 =$

g. $900000 + 70000 + 5000 + 0 + 30 + 0 =$

h. $40000 + 6000 + 0 + 80 + 2 =$

2. Write in the expanded form.

a. $25,79,872 =$

b. $7,84,295 =$

c. $67,452 =$

d. $7,04,296 =$

e. $99,00,999 =$

f. $32,00,000 =$

g. $4,63,48,514 =$

3. Write in figures.

- a. Sixty thousand five hundred and twenty-four
- b. Three lakh twenty-two thousand four hundred and seventy-four
- c. Fifty-four lakh sixteen thousand four hundred and seventy-five
- d. Eight crore
- e. Four crore eighty-one lakh thirty-two thousand one hundred and eighteen
- f. Eleven lakh seventeen thousand and fourteen
- g. Sixty-nine lakh seven thousand two hundred and one
- h. Two lakh ninety-nine thousand one hundred and seventy-nine
- i. Twenty-eight lakh three hundred and fifty-four
- j. Twenty thousand two hundred and two
- k. Eighteen thousand five hundred and sixty-seven

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

TC	C	TL	L	TTh	Th	H	T	O
----	---	----	---	-----	----	---	---	---

4. Write in figures.

- a. Twenty-two thousand two hundred and fifty-eight
- b. Seventy-three thousand four hundred
- c. Sixty-two thousand and twenty-five
- d. Five lakh forty-one thousand five hundred and eight
- e. Thirty-four lakh fifty-three thousand five hundred and twenty-one
- f. One crore twenty-three lakh forty-five thousand six hundred and seventy-eight

Do these in your notebook



5. Write in words.

- | | | | | |
|--------------|-------------|----------------|----------------|----------------|
| a. 15,000 | b. 27,968 | c. 72,502 | d. 61,006 | e. 80,202 |
| f. 6,00,000 | g. 2,34,230 | h. 28,06,000 | i. 65,37,726 | j. 84,00,400 |
| k. 44,22,888 | l. 9,73,836 | m. 8,00,00,000 | n. 5,48,97,720 | o. 4,23,61,248 |

6. Rewrite the numbers with commas separating the periods.

- | | | | | |
|-------------|------------|-------------|------------|------------|
| a. 543268 | b. 8636236 | c. 18732 | d. 781000 | e. 222222 |
| f. 12640385 | g. 8765432 | h. 46020821 | i. 2458341 | j. 3000247 |

7. Write the consecutive numbers that come after.

a. 63,255

<input type="text"/>					
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

b. 51,996

<input type="text"/>					
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

c. 1,12,732

<input type="text"/>					
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

d. 19,20,897

<input type="text"/>					
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

e. 64,32,169

<input type="text"/>					
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------

8. Write the predecessor (the number just before).

- | | | |
|--------------------|--------------------|----------------------|
| a. _____ 42,000 | b. _____ 62575 | c. _____ 53,200 |
| d. _____ 2,98,420 | e. _____ 4,82,002 | f. _____ 14,26,742 |
| g. _____ 26,08,000 | h. _____ 38,00,000 | i. _____ 1,37,21,168 |

9. Write the successor (the number just after).

- | | | |
|-------------------|-------------------|-------------------|
| a. 29,999 _____ | b. 14,099 _____ | c. 45,437 _____ |
| d. 22,671 _____ | e. 70,899 _____ | f. 1,62,522 _____ |
| g. 3,45,764 _____ | h. 5,88,999 _____ | i. 3,99,999 _____ |

10. Write the numbers just before and after.

a. 43200

b. 24375

c. 52619

d. 53000

e. 48271

f. 73789

g. 55000

h. 326742

i. 230999

j. 700000

k. 2232425

l. 4399999

11. Write the number between.

a. 9 999

10 001

b. 11 675

11 677

c. 25 700

25 702

d. 47 999

48 001

e. 67 524

67 526

f. 99 998

1 00 000

g. 3 42 300

3 42 302

h. 5 27 342

5 27 344

i. 21 43 131

21 43 133

j. 71 85 999

71 86 001

12. Continue the pattern.

a. 21,402 21,502 21,602

b. 36,220 36,260 36,300

c. 87,000 86,975 86,950

d. 7,22,123 7,23,223 7,24,323

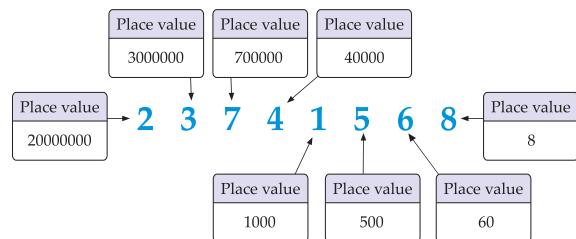
e. 21,80,245 21,79,245 21,78,245

Place value

You know that the place value of a digit is the product of the digit and the value of the place. Let us put the digits of 2,37,41,568 in a place-value chart.

TC	C	TL	L	TTh	Th	H	T	O
	2	3	7	4	1	5	6	8

23741568 = 2 crore + 3 ten lakhs + 7 lakhs + 4 ten thousands
+ 1 thousands + 5 hundreds + 6 tens + 8 ones
= 20000000 + 3000000 + 700000 + 40000 + 1000
+ 500 + 60 + 8.



Comparing and Arranging

To compare numbers, compare their digits left to right.

If the digits at a place are equal, compare the digits at the next place on the right.



C	TL	L	TTh	Th	H	T	O
2	3	4	5	6	7	8	9

C	TL	L	TTh	Th	H	T	O
2	3	6	0	0	0	0	0

$$C: 2 = 2 \quad TL: 3 = 3 \quad L: 4 < 6$$

$$23456789 < 23600000$$

C	TL	L	TTh	Th	H	T	O
3	8	0	4	3			

C	TL	L	TTh	Th	H	T	O
	3	8	0	3	4		

$$\begin{aligned} TTh: 3 &= 3 & Th: 8 &= 8 & H: 0 &= 0 & T: 4 &> 3 \\ 38043 &> 38034 \end{aligned}$$

C	TL	L	TTh	Th	H	T	O
7	4	2	8	1	6		

C	TL	L	TTh	Th	H	T	O
7	4	2	6	8	8		

$$\begin{aligned} L: 7 &= 7 & TTh: 4 &= 4 & Th: 2 &= 2 & H: 8 &> 6 \\ 742816 &> 742688 \end{aligned}$$

- Arrange in ascending order (from the smallest to the largest).

25,683 62,497 7,43,850 956 11,61,090 8,429

956 8,429 25,683 62,497 7,43,850 11,61,090

- Arrange in descending order (from the largest to the smallest).

43,562 602 1,03,518 13,70,279 88 5,725

13,70,279 1,03,518 43,562 5,725 602 88

- Numbers with lesser digits are smaller.
- Numbers with more digits are larger.
- For numbers with equal digits, compare the digits left to right.

Making the Smallest and the Greatest Numbers with Given Digits

Making the Greatest Number with Given Digits

The greatest number will have the most crores, lakhs, thousands, and so on. So, write the given digits in descending order. If any digits are equal, keep them together.

Given digits: 6,7,8,4,6,0,5
Greatest number
with these digits: 8766540



Given digits: 5,3,6,4,2,0,1,7
Greatest number
with these digits: 76543210

Making the Smallest Number with Given Digits

Write the digits in ascending order. As 0012458 is 12458, you cannot start numbers with zeros. If there are zeros, place them after the next-smallest digit.

Given digits: 6,9,5,4,9
Smallest number
with these digits: 45699



Given digits: 4,8,2,0,5,0,1
Smallest number
with these digits: 1002458



Exercise 3B

1. Write the place value of the digits.

- a. 26,724

4	_____	2	_____	7	_____	6	_____	2	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- b. 42,761

4	_____	2	_____	7	_____	6	_____	1	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- c. 7,59,062

2	_____	6	_____	0	_____	9	_____	7	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- d. 2,57,960

2	_____	6	_____	5	_____	9	_____	7	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- e. 48,39,060

4	_____	8	_____	3	_____	9	_____	6	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- f. 80,06,721

1	_____	2	_____	7	_____	6	_____	8	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- g. 32,46,709

3	_____	2	_____	4	_____	6	_____	7	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- h. 60,07,923

6	_____	7	_____	9	_____	2	_____	3	_____
---	-------	---	-------	---	-------	---	-------	---	-------
- i. 4,00,58,257

4	_____	5	_____	8	_____	2	_____	5	_____
---	-------	---	-------	---	-------	---	-------	---	-------

2. Fill in.

- In 15 273, 5 is in the _____ place, and 1 is in the _____ place.
- In 2 94 703, 2 is in the _____ place, and 9 is in the _____ place.
- In 1 46 893, 4 is in the _____ place, and 1 is in the _____ place.
- In 25 471, the digit in the ten thousands place is ___, and its place value is _____.
- In 4 87 200, the digit in the lakhs place is ___, and its place value is _____.
- In 41 63 820, the digit in the lakhs place is ___, and that in the ten lakhs place is _____.
- In 38 94 150, the place value of 3 is _____, and that of 8 is _____.
- In 6 79 483, the place value of 6 is _____, and that of 7 is _____.
- In 73 208, the place value of 7 is _____, that of 3 is ___, and that of 2 is _____.

3. Write >,< or =.

- 56 999  99 699
- 1 16 521  18 888
- 60 845  58 643
- 1 12 34 480  87 68 521
- 62 50 003  62 50 003
- 76 82 500  80 000
- 6 90 00 484  6 90 20 484
- 5 23 450  55 600
- 40 000  44 444
- 5 28 242  58 242
- 30 30 300  78 787
- 38 020  38 020

4. Write the smallest number first and then write the largest number.

- 5 657 6 26 385 12 44 210 53 681 5 00 222 
- 56 308 66 584 2 34 600 22 34 600 22 600 
- 8 70 60 502 8 60 70 502 8 70 50 602 8 50 70 602 8 70 70 702 
- 48 95 795 5 637 2 23 24 226 4 83 946 5 96 000 
- 52 731 8 34 140 13 01 022 53 21 052 8 61 250 
- 2 04 06 008 40 60 800 9 08 060 90 80 604 4 07 08 090 

5. Write in ascending order.

a. 63 683 56 789 4 45 682 44 896 3 48 792

b. 6 80 900 6 90 900 74 64 523 83 59 258 75 59 270

c. 49 470 38 63 929 2 60 56 479 32 83 704 2 34 47 509

d. 89 00 000 89 000 8 888 6 00 900 90 00 600

e. 2 23 35 590 59 67 750 8 25 32 394 70 65 537 36 40 466

6. Write in descending order.

a. 9 290 29 380 47 56 659 74 83 920 29 38 940

b. 26 000 37 000 8 000 92 00 000 28 000

c. 43 47 500 9 23 270 50 500 30 35 395 27 30 350

d. 666 26 306 6 200 36 40 460 6 50 56 606

e. 45 28 693 77 55 962 798 8 49 473 53 952

7. Make the greatest and the smallest numbers using all the given digits.

Greatest number

a. 9 5 7 1 3 [] []

Smallest number

b. 4 0 2 8 6 [] []

c. 2 3 9 7 8 5 [] []

d. 2 6 0 7 5 9 7 []

e. 8 5 0 1 3 0 2 4

1. Using Roman numerals, how many numbers up to 20 can you make with 2, 3 and 4 toothpicks?

Toothpicks	Numbers in Roman numerals		
a. 2		√	X
b. 3			
c. 4			

2. Correct the following by shifting a toothpick in each. One has been done for you, but can you think of another way of doing it?

a.	$\sqrt{+} = $	b.	$\vee + = \vee$
	$\sqrt{-} = $		
c.	$\vee + = \vee$	d.	$\times + \vee = \vee $

3. In India, numbers beyond 999 are grouped into periods that have 2 places. In the system used in many countries, all periods have three places. The international place-value chart based on this system is shown below. The number shown is forty-five million three hundred thousand.

Millions period			Thousands period			Ones period		
Hundred millions	Ten millions	Millions	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
4	5	3	0	0	0	0	0	0

In the numbers below, mark the periods every 3 digits from the right. Then write the international number names.

a. One lakh	100000	100,000 hundred thousand
b. Ten lakh	1000000	1,000,000 one million
c. Six lakh	600000	
d. Fifty lakh	5000000	
e. Two crore	20000000	
f. Ten crore	100000000	
g. Fourteen lakh	1400000	

4. Addition

You know how to add. Let us add 341, 113 and 3224 in three different orders.

$$\begin{array}{r}
 341 \\
 + 113 \\
 \hline
 454 \\
 + 3224 \\
 \hline
 3678
 \end{array}$$

$$\begin{array}{r}
 3224 \\
 + 341 \\
 \hline
 3565 \\
 + 113 \\
 \hline
 3678
 \end{array}$$

$$\begin{array}{r}
 113 \\
 + 3224 \\
 \hline
 3337 \\
 + 341 \\
 \hline
 3678
 \end{array}$$

The sum of numbers in any order is the same.



You also know what happens when zero is added to a number.



number + 0 = same number
0 + number = same number

$$8 + 0 = 8$$

$$56 + 0 = 56$$

$$941 + 0 = 941$$

$$3697 + 0 = 3697$$

$$0 + 8 = 8$$

$$0 + 56 = 56$$

$$0 + 941 = 941$$

$$0 + 3697 = 3697$$

These **properties** of addition hold true for the addition of large numbers as well. We add large numbers in the same way we add smaller numbers. Starting from the ones places, we move left, adding the digits at each place one after the other.

*

T	T	H	T	O
5	3	1	4	2
+	1	4	6	5
	3			
6	7	7	9	5

*

L	T	T	H	T	O
8	5	3	1	4	2
+	1	1	4	6	5
	3				
9	6	7	7	9	5

*

L	T	T	H	T	O
2	3	4	5	0	1
3	1	0	0	1	2
+	1	2	3	2	3
	+	1	3	1	2
	5	6	9	9	6



Exercise 4A

Add.

1. a.

T	T	H	T	O
2	1	4	5	3
+ 2	6	5	4	4

b.

T	T	H	T	O
2	6	7	3	0
+ 6	3	1	5	9

c.

T	T	H	T	O
8	5	6	0	4
+ 4	3	8	5	

2. a.

L	T	T	H	T	O
3	4	5	6	1	7
+ 3	5	4	1	6	0

b.

L	T	T	H	T	O
4	5	8	7	6	9
+ 5	4	0	2	1	0

c.

L	T	T	H	T	O
6	1	9	5	4	
+ 4	2	8	0	4	5

3. a.

6	1	4	7	5
+ 3	7	4	1	3

b.

2	7	8	5	0
+ 6	2	1	3	6

c.

8	1	0	6	7	2
+ 7	7	3	1	6	

d.

5	2	4	3	6	1
+ 3	7	4	4	2	8

4. a.

1	3	2	6	4
+ 1	2	1	2	0
+ 3	3	3	0	2

b.

6	4	2	1	7
+ 1	1	0	3	1
+ 3	6	4	1	

c.

2	4			
+ 2	5	2		
+ 3	3	0	2	
+ 2	6	4	1	1

d.

2	3	4	5	6	7
+ 2	1	0	0	1	2
+ 3	4	1	3	2	0
+ 1	3	1	0	0	

5. Fill in.

a. $39\ 698 + 14\ 127 = 14\ 127 + \underline{\hspace{2cm}}$

b. $15\ 290 + \underline{\hspace{2cm}} = 10\ 638 + 15\ 290$

c. $\underline{\hspace{2cm}} + 7\ 10\ 245 = 7\ 10\ 245 + 3\ 925$

d. $50\ 391 + 5\ 20\ 139 = \underline{\hspace{2cm}} + 50\ 391$

e. $95\ 246 + \underline{\hspace{2cm}} = 95\ 246$

f. $\underline{\hspace{2cm}} + 58\ 316 = 58\ 316$

g. $0 + \underline{\hspace{2cm}} = 74\ 664$

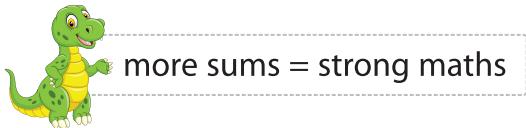
6. Arrange in columns and add:

a. 35 681 and 4 217 b. 132, 50 222 and 4 25 624 c. 1 22 254, 3 15 410, 30 102 and 2 212

d. Four lakh fifteen thousand three hundred, three lakh seventy-two thousand four hundred and fifty, one lakh ten thousand one hundred and twenty-five

e. Two thousand three hundred and ten, twenty-four thousand four hundred and two, two hundred and forty-five

7. a. Add 26, 150, 3 425 and 60 275 in three different orders to get the same sum.
 b. Add 8, 12, 230 and 1 475 in three different orders to get the same sum.



Add.

8. a.
$$\begin{array}{r} 37316 \\ + 2673 \\ \hline \end{array}$$
- b.
$$\begin{array}{r} 23514 \\ + 36364 \\ \hline \end{array}$$
- c.
$$\begin{array}{r} 25341 \\ + 713656 \\ \hline \end{array}$$
- d.
$$\begin{array}{r} 232564 \\ + 545213 \\ \hline \end{array}$$
-
9. a.
$$\begin{array}{r} 432 \\ + 6215 \\ + 83250 \\ \hline \end{array}$$
- b.
$$\begin{array}{r} 13543 \\ + 23131 \\ + 43202 \\ \hline \end{array}$$
- c.
$$\begin{array}{r} 746523 \\ + 120254 \\ + 20222 \\ \hline \end{array}$$
- d.
$$\begin{array}{r} 234231 \\ + 512120 \\ + 121637 \\ \hline \end{array}$$
-
10. a.
$$\begin{array}{r} 12011 \\ + 53720 \\ + 10046 \\ + 24121 \\ \hline \end{array}$$
- b.
$$\begin{array}{r} 461500 \\ + 16345 \\ + 100012 \\ + 21131 \\ \hline \end{array}$$
- c.
$$\begin{array}{r} 432768 \\ + 46100 \\ + 21131 \\ + 300000 \\ \hline \end{array}$$
- d.
$$\begin{array}{r} 233223 \\ + 121012 \\ + 302030 \\ + 221622 \\ \hline \end{array}$$

11. Add

- a. 64 210, 10 315 and 5 12 463 b. 2 20 251, 2 10 426, 44 002 and 4 13 210
- c. Two lakh twenty thousand one hundred and eleven, seven lakh five thousand two hundred and eighty-three, sixty-two thousand four hundred and four
- d. Three thousand two hundred and one, fifteen thousand five hundred, one hundred and forty-five

12. Find the sum.

- a. $23\,250 + 41\,127 + 15\,412$ b. $2\,42\,670 + 1\,20\,105 + 3\,15\,214$
 c. $4\,550 + 21\,320 + 8\,63\,100$ d. $6\,10\,200 + 25\,420 + 3\,101 + 1\,157$

Addition with Carrying

*

	L	T	Th	Th	H	T	O
+	3	3	8	4	2	4	
	+ 1	9	4	3	5	2	
		5	3	2	7	7	6

O: $4 + 2 = 6$ T: $2 + 5 = 7$ H: $4 + 3 = 7$

Th: $8 + 4 = 12$

$12 \text{ thousands} = 10 \text{ thousands} + 2 \text{ thousands}$
 $= 1 \text{ ten thousands} + 2 \text{ thousands}$

Write 2, carry 1 ten thousand.

TTh: $1 + 3 + 9 = 13$

$13 \text{ ten thousands} = 10 \text{ ten thousands} + 3 \text{ ten thousands}$
 $= 1 \text{ lakh} + 3 \text{ ten thousands.}$

Write 3, carry 1 lakh.

L: $1 + 3 + 1 = 5$



*

4	3	6	1	4	6
+ 3	7	2	5	8	6
+ 4	5	9	5	8	
+ 1	8	4	3	5	
	8	7	3	0	8
	5				

O: $6 + 6 + 8 + 5 = 25$

Write 5, carry 2 tens.

T: $2 + 4 + 8 + 5 + 3 =$



You should now do the carrying in your mind, without writing the carried number.

Finding the Missing Digits in Addition Sums

$1257 + 2425 = 3682$ (sum)

$3682 - 1257 = 2425$

$3682 - 2425 = 1257$

sum - one number = the other number



* Fill in the missing digits.

5	2	□	7	4
+ 1	4	6	5	□
+ 1	□	4	□	1
	8	3	4	5
	7			

1

O: Sum is 7.
 One number in the sum
 is 5 ($4 + 1$). The other
 number is $7 - 5 = 2$



5	2	□	7	4
+ 1	4	6	5	2
+ 1	□	4	□	1
	8	3	4	5
	7			

2

T: $7 + 5 = 12$
 As $12 > 5$, the
 sum must be 15.
 $15 - 12 = 3$

1				
5	2	□	7	4
+ 1	4	6	5	2
+ 1	□	4	3	1
	8	3	4	5
	7			

3

H: $1 + 6 + 4 = 11$
 As $11 > 4$, the
 sum must be 14.
 $14 - 11 = 3$

1	1	1		
5	2	3	7	4
+ 1	4	6	5	2
+ 1	6	4	3	1
	8	3	4	5
	7			

4

Th: $1 + 2 + 4 = 7$
 As $7 > 3$, the
 sum must be 13.
 $13 - 7 = 6$



Exercise 4B

Add.

1. a. TTh Th H T O

$$\begin{array}{r} 62154 \\ + 26556 \\ \hline \end{array}$$

b. TTh Th H T O

$$\begin{array}{r} 63683 \\ + 24327 \\ \hline \end{array}$$

c. TTh Th H T O

$$\begin{array}{r} 37935 \\ + 32865 \\ \hline \end{array}$$

2. a. L TTh Th H T O

$$\begin{array}{r} 452678 \\ + 328254 \\ \hline \end{array}$$

b. L TTh Th H T O

$$\begin{array}{r} 796745 \\ + 82564 \\ \hline \end{array}$$

c. L TTh Th H T O

$$\begin{array}{r} 284739 \\ + 318399 \\ \hline \end{array}$$

3. a. L TTh Th H T O

$$\begin{array}{r} 71352 \\ + 7649 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 26986 \\ + 28067 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 74461 \\ + 436595 \\ \hline \end{array}$$

d.

$$\begin{array}{r} 639584 \\ + 257486 \\ \hline \end{array}$$

4. a.

$$\begin{array}{r} 33352 \\ + 56083 \\ + 5637 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 2537 \\ + 80208 \\ + 79160 \\ \hline \end{array}$$

c.

$$\begin{array}{r} 148260 \\ + 259371 \\ + 360482 \\ + 171593 \\ \hline \end{array}$$

d.

$$\begin{array}{r} 567 \\ + 8901 \\ + 23456 \\ + 789012 \\ \hline \end{array}$$

5. Add.

a. 26743 and 5318 b. 5385, 1785 and 542673 c. 231458, 462480, 14397 and 3502

d. Six lakh thirty-eight thousand, one lakh fifty-four thousand and fifty-six, eighty-nine thousand one hundred and sixty-four

e. Three thousand five hundred and seventeen, sixty-four thousand five hundred and one, sixteen thousand seven hundred and forty-nine

6. Fill in the missing digits.

a.

$$\begin{array}{r} 8\square5\square0 \\ + 427\square \\ \hline \square2\square35 \end{array}$$

b.

$$\begin{array}{r} 57\square34 \\ + \square258\square \\ \hline 7\square8\square7 \end{array}$$

c.

$$\begin{array}{r} 6\square3\square2\square \\ + \square5\square854 \\ + 2472\square6 \\ \hline 1201492 \end{array}$$

d.

$$\begin{array}{r} 25\square4\square6 \\ + 1\square9\square5\square \\ + \square31682 \\ \hline 621351 \end{array}$$

More sums for practice



Add.

7. a.

4	8	9	4	5	
+	6	2	0	8	5

b.

4	5	2	7	1	
+	5	7	6	2	9

c.

5	4	1	6	5	7	
+	3	6	8	7	2	6

d.

7	5	1	9	4	7	
+	7	8	6	3	4	

8. a.

6	2	7	6	2	
+	1	0	3	6	
+	5	8	2	5	4

b.

1	5	1	4	2	6	
+	5	4	3	2	1	6
+	2	3	4	5	6	

c.

4	0	6	2	1	9	
+	3	9	5	1	3	0
+	2	8	4	0	5	1
+	1	7	3	9	7	2

d.

3	6	9	2	5	8	
+	1	4	7	1	4	
+	2	3	4	5	6	7
+	8	9	0	1	2	

9. a. $5\ 726 + 34\ 850 + 64\ 369$

b. $52\ 250 + 35\ 768 + 6\ 30\ 437$

c. $58 + 5\ 623 + 60\ 479 + 4\ 23\ 405$

d. $4\ 38\ 264 + 5\ 83\ 526 + 2\ 30\ 510 + 25\ 252$

10. Fill in the missing digits.

a.

4	9	□	7	8					
+	3	□	5	□	9				
					□	2	1	8	□

b.

2	□	7	3	□					
+	4	1	□	7	4				
					□	8	0	□	6

c.

3	7	4	9	5	6						
+	□	1	□	1	□	1					
+	2	□	2	□	4	□					
						7	0	8	5	1	1

d.

2	3	9	8	7	7						
+	5	□	6	□	8	□					
+	1	0	4	0	□	0					
						□	7	□	1	1	2

Word Sums

- A number is 25,340 more than the sum of 2,45,304 and 4,39,752. Find the number.

2	4	5	3	0	4						
+	4	3	9	7	5	2					
						6	8	5	0	5	6

The sum of 245304 and 439752 is 685056.
25340 more than this sum is 685056 + 25340.

6	8	5	0	5	6						
+	2	5	3	4	0						
						7	1	0	3	9	6

∴ the number is 71,03,96.

- A state produced 25 20 450 kg of wheat in a year. It produced 32 25 310 kg and 7 18 320 kg of wheat in the next two years. How much wheat did the state produce in the three years?

The wheat produced in the three years
= 2520450 kg + 3225310 kg + 718320 kg.

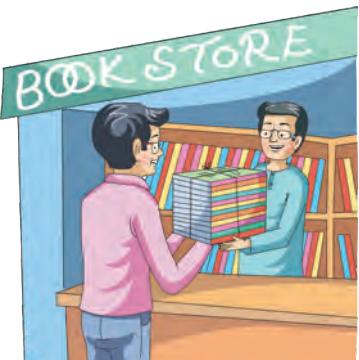
2	5	2	0	4	5	0	kg							
+ 3	2	2	5	3	1	0	kg							
+ 7	1	8	3	2	0	kg								
							6	4	6	4	0	8	0	kg

∴ wheat produced = 64,64,080 kg.



Exercise 4C

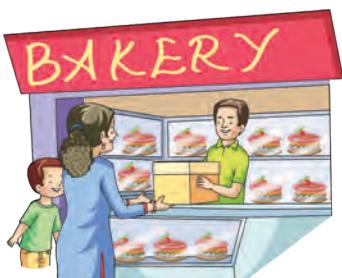
1. 45,730 girls and 48,285 boys took an exam.
How many children took the exam?



2. *Hello Maths* book sold 53,290 copies in the year 2017. In both 2018 and 2019, the number increased by 5,800. How many copies were sold in 2019?



3. A bus costs ₹ 5,56,750. A truck costs ₹ 2,80,500 more than bus. How much does a truck cost?



4. Shri Cakes sold 18 50 480, 10 35 620 and 9 28 550 cakes in three years. How many cakes in all did it sell?

5. When 47,526 is subtracted from a number, we get 68,195. Find the number.
6. A number is 65 280 more than the sum of 1 35 606 and 2 57 810. Find the number.
7. The populations of three towns are 50128, 132150 and 62575. What is their total population?
8. Ritu won ₹ 5,25,400 in a game show, ₹ 2,68,750 in a quiz show and ₹ 1,50,650 in a dance competition. How much money did she win in all?
9. Mr Solanki covered 15 769 km in his car one year, 12 520 km the next year and 16 485 km the following year. What was the total distance covered by his car in the three years?
10. What number is 15,220 more than 50,780?
11. A number is 4,10,586 more than 2,89,625. Find the number.
12. Raju has saved ₹ 4,10,825 in X Bank. He has savings of ₹ 3,45,250 in Y-Bank and ₹ 5,74,338 in Z-Bank. What is his total savings in the three banks?

5. Subtraction

You know how to subtract. You also know the following properties of subtraction.

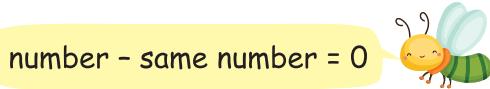


number - 0 = same number

$$9 - 0 = 9$$

$$749 - 0 = 749$$

$$2651 - 0 = 2651$$



number - same number = 0

$$62 - 62 = 0$$

$$842 - 842 = 0$$

$$4573 - 4573 = 0$$

Each number in a subtraction sum has a special name.
The number from which we subtract is the **minuend**.
The number that is subtracted is the **subtrahend**.
The result of the subtraction is called the **difference**.

8888	←	Minuend
- 2222	←	Subtrahend
<hr/>		
6666	←	Difference

Simple Subtraction

We subtract large numbers in the same way we subtract smaller numbers.

*

T	Th	Th	H	T	O
3	5	7	4	8	
-	2	4	5	3	0
	1	1	2	1	8

*

L	T	Th	Th	H	T	O
6	7	5	4	8	9	
-	3	5	2	1	0	7
	3	2	3	3	8	2

- If the minuend is 5,49,637 and the subtrahend is 2,36,514 then find the difference.

difference = minuend - subtrahend

5	4	9	6	3	7
-	2	3	6	5	1
	3	1	3	1	2

$\therefore \text{difference} = 3,13,123.$

Other facts:
subtrahend = minuend - difference
 and
minuend = difference + subtrahend





Exercise 5A

Subtract.

1. a.

T	T	H	T	O
8	6	7	3	6
-	5	3	4	3

b.

T	T	H	T	O
3	7	2	8	1
-	2	1	3	1

c.

T	T	H	T	O
7	6	4	3	5
-	7	3	0	2

2. a.

L	T	T	H	T	O
4	6	8	9	2	4
-	2	3	4	4	1

b.

L	T	T	H	T	O
5	8	0	4	7	3
-	4	0	2	5	1

c.

L	T	T	H	T	O
3	6	9	2	5	8
-	3	3	5	2	3

3. a.

1	8	5	9	6
-	6	5	4	3

b.

5	8	1	4	7
-	3	2	1	2

c.

6	4	8	5	3
-	2	1	0	0

d.

3	5	9	7	3
-	3	5	6	3

4. a.

6	7	8	9	9	1
-	3	5	4	3	2

b.

2	6	9	4	8	2
-	2	3	4	4	3

c.

9	5	3	2	3	5
-	4	2	2	3	3

d.

8	4	6	3	2	7
-	5	1	3	0	1

5. Arrange in columns and subtract.

a. $61\,458 - 20\,143$

b. $29\,798 - 6\,365$

c. $97\,584 - 95\,243$

d. $9\,76\,596 - 6\,23\,173$

e. $3\,26\,845 - 3\,01\,413$

f. $6\,07\,453 - 6\,01\,210$

6. a. Subtract three lakh fifty thousand three hundred from three lakh eighty-two thousand six hundred and fifteen.

b. Subtract forty-one thousand five hundred and thirty-six from five lakh seventy-four thousand nine hundred and fifty-eight.

7. a. If the subtrahend = 74,537 and the minuend = 7,78,789 then find the difference.

b. If the minuend = 52,475 and the subtrahend = 15,763 then find the difference.

c. Subtract 49,271 from 2,59,895.

Subtraction with Borrowing

You already know how to regroup by borrowing.

You can borrow from other places of higher value in the same way.

You can check subtraction with the help of addition.

If the sum of the subtrahend and the difference gives the minuend, then the subtraction is done correctly.

subtrahend + difference = minuend

$$6857 - 4512 = 2345 \text{ then } 4512 + 2345 = 6857.$$

- Subtract and check the answer.

L	T	T	H	T	O
8	17	7	4	6	8 7
9	8	4	6	8	7
-	5	9	6	2	7 1
	3	8	8	4	1 6

Th: $4 - 6 \times$

Borrow 1 ten thousand from 8 ten thousands.

Then **Th:** $14 - 6$ and **TTh:** $7 - 9. \times$

Borrow 1 lakh (10 ten thousands) from 9 lakhs.

Then **TTh:** $17 - 9$ and **L:** $8 - 5.$



As $596271 + 388416 = 984687$, the answer is correct.

* $\begin{array}{r} 57\overset{4}{\cancel{5}}\overset{10}{\cancel{0}}00 \\ - 342321 \\ \hline \end{array}$

$\rightarrow \begin{array}{r} 57\overset{4}{\cancel{5}}\overset{9}{\cancel{0}}\overset{10}{\cancel{0}}0 \\ - 342321 \\ \hline \end{array}$

$\rightarrow \begin{array}{r} 57\overset{4}{\cancel{5}}\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{10}{\cancel{0}} \\ - 342321 \\ \hline \end{array}$

$\rightarrow \begin{array}{r} 57\overset{4}{\cancel{5}}\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{10}{\cancel{0}} \\ - 342321 \\ \hline 232679 \end{array}$

Borrow mentally and work out the subtraction.



Finding the Missing Digits in Subtraction Sums

Look at the subtraction sum $8 - 3 = 5$. Related facts: $5 + 3 = 8$ and $8 - 5 = 3$. As you can see, you can find a missing minuend digit by addition. And you can find the other digits by subtraction from the minuend. *But remember to take care of the borrowed and carried numbers.*

- Fill in the missing digits.

$$\begin{array}{r} 6\boxed{}35\boxed{} \\ - 46\boxed{}\boxed{}3 \\ \hline 15824 \end{array}$$

1 O: $? - 3 = 4$
Write 7 as $4 + 3 = 7$.
T: $5 - ? = 2$
Write 3 as $5 - 2 = 3$.



$$\begin{array}{r} 6\boxed{2}35\boxed{7} \\ - 46\boxed{5}\boxed{3}3 \\ \hline 15824 \end{array}$$

2 H: $3 - ? = 8$. As $3 < 8$, it must be made 13 by borrowing. Then $13 - 8 = 5$.
Th: Minuend = $6 + 5 = 11$. But 1 was borrowed from this place. So the number is $11 + 1 = 12$. Write 2. Carry 1.
TTh: Minuend = $4 + 1 + 1 = 6$.





Exercise 5B

Subtract.

1. a.

T	T	H	T	O
7	6	4	2	5
-	3	4	3	6

$$\begin{array}{r} 76425 \\ - 34367 \\ \hline \end{array}$$

b.

T	T	H	T	O
8	3	9	7	2
-	4	6	8	9

$$\begin{array}{r} 83972 \\ - 46897 \\ \hline \end{array}$$

c.

T	T	H	T	O
2	5	1	4	8
-	2	4	6	9

$$\begin{array}{r} 25148 \\ - 24693 \\ \hline \end{array}$$

2. a.

L	T	T	H	T	O
4	7	2	0	3	5
-	2	8	0	2	4

$$\begin{array}{r} 472035 \\ - 280244 \\ \hline \end{array}$$

b.

L	T	T	H	T	O
7	1	0	0	5	3
-	3	1	3	4	1

$$\begin{array}{r} 710053 \\ - 313414 \\ \hline \end{array}$$

c.

L	T	T	H	T	O
2	0	1	4	0	7
-	1	6	6	0	8

$$\begin{array}{r} 201407 \\ - 166087 \\ \hline \end{array}$$

3. a.

3	9	2	6	4
-	2	5	6	8

$$\begin{array}{r} 39264 \\ - 25689 \\ \hline \end{array}$$

b.

8	1	0	5	1
-	5	2	8	5

$$\begin{array}{r} 81051 \\ - 5285 \\ \hline \end{array}$$

c.

3	2	0	0	0
-	1	5	0	5

$$\begin{array}{r} 32000 \\ - 15057 \\ \hline \end{array}$$

d.

5	0	0	0	0
-	2	1	2	3

$$\begin{array}{r} 50000 \\ - 21234 \\ \hline \end{array}$$

e.

4	5	3	6	8	2
-	2	8	7	5	9

$$\begin{array}{r} 453682 \\ - 287596 \\ \hline \end{array}$$

f.

4	0	0	7	0	1
-	1	1	5	6	0

$$\begin{array}{r} 400701 \\ - 115604 \\ \hline \end{array}$$

g.

8	3	5	0	2	0
-	7	6	9	3	9

$$\begin{array}{r} 835020 \\ - 769396 \\ \hline \end{array}$$

h.

3	6	2	7	0	0
-	8	6	7	4	0

$$\begin{array}{r} 362700 \\ - 86740 \\ \hline \end{array}$$

4. Arrange in columns and subtract. Check the answers you get.

a. $92\,145 - 36\,296$

b. $20\,140 - 765$

c. $23\,456 - 22\,799$

d. $6\,14\,406 - 2\,47\,708$

e. $5\,42\,520 - 53\,830$

f. $6\,00\,000 - 58\,639$

5. a. If the subtrahend is 83,621 and the minuend is 8,66,575, find the difference.

b. If the minuend is 54,321 and the subtrahend is 29,467, find the difference.

6. Fill in.

a. $1\,00\,000 - \underline{\hspace{2cm}} = 42\,305$

b. $30\,303 - \underline{\hspace{2cm}} = 6\,565$

c. $\underline{\hspace{2cm}} + 2\,98\,765 = 4\,00\,000$

d. $\underline{\hspace{2cm}} + 12\,999 = 13\,001$

e. $4\,35\,507 + \underline{\hspace{2cm}} = 4\,48\,362$

f. $54\,238 + \underline{\hspace{2cm}} = 77\,000$

7. Fill in the missing digits.

a.

<input type="text"/>	2	7	<input type="text"/>	1	0
-	3	6	<input type="text"/>	6	<input type="text"/>

b.

4	1	3	5	2	6
-	1	<input type="text"/>	2	<input type="text"/>	<input type="text"/>

c.

6	2	9	8	7
-	4	<input type="text"/>	<input type="text"/>	<input type="text"/>

d.

8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
-	4	5	3	5

More sums for practice



Subtract and check the answers.

8. a.
$$\begin{array}{r} 72138 \\ - 4275 \\ \hline \end{array}$$
- b.
$$\begin{array}{r} 40018 \\ - 37582 \\ \hline \end{array}$$
- c.
$$\begin{array}{r} 819123 \\ - 458739 \\ \hline \end{array}$$
- d.
$$\begin{array}{r} 815066 \\ - 531068 \\ \hline \end{array}$$
9. a.
$$\begin{array}{r} 394758 \\ - 284762 \\ \hline \end{array}$$
- b.
$$\begin{array}{r} 513177 \\ - 69392 \\ \hline \end{array}$$
- c.
$$\begin{array}{r} 753224 \\ - 738596 \\ \hline \end{array}$$
- d.
$$\begin{array}{r} 268943 \\ - 99857 \\ \hline \end{array}$$

10. Arrange in columns and subtract.

- a. $38965 - 36799$ b. $50000 - 3846$ c. $74562 - 68953$
 d. $900000 - 67234$ e. $636815 - 483326$ f. $532018 - 453139$

11. Fill in the missing digits.

- a.
$$\begin{array}{r} 2\Box\Box43 \\ - 137\Box\Box \\ \hline 15191 \end{array}$$
- b.
$$\begin{array}{r} 8\Box3\Box9 \\ - 67\Box2\Box \\ \hline 20825 \end{array}$$
- c.
$$\begin{array}{r} 47\Box\Box8\Box \\ - 3\Box5834 \\ \hline 1632\Box6 \end{array}$$
- d.
$$\begin{array}{r} 59\Box6\Box2 \\ - 148\Box55 \\ \hline 4\Box587\Box \end{array}$$

Word Sums

- What must be added to 87 243 to get 175 321?

The number to be added = $175321 - 87243$.

$$\begin{array}{r} 175321 \\ - 87243 \\ \hline 88078 \end{array}$$

∴ the number is 88,078.

- A businessman bought 90 fans from a factory for ₹45,000. He sold them to a shop for ₹54,000.
 How much money did he make? (What was his profit?)

Amount spent on buying = ₹ 45 000.

Amount received on selling = ₹ 54 000.

Money made on sale (profit) = ₹ 54 000 – ₹ 45 000.

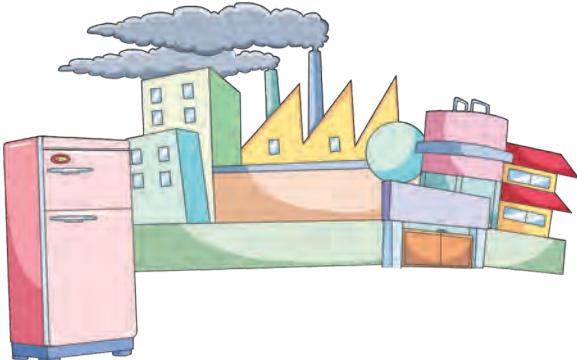
$$\begin{array}{r} 54000 \\ - 45000 \\ \hline 9000 \end{array}$$

∴ profit = ₹ 9,000.



Exercise 5C

1. 23,958 roses grew in Ram's garden and 23,689 grew in Shyam's garden. On whose garden did more roses grow and how many more?



3. Seema won a singing contest by 75,926 votes. Shikha came second. If Seema got 2,30,405 votes, how many votes did Shikha get?



2. A factory made 47,800 fridges in 2018. If 3,452 fridges were made in December, how many fridges were made till November?

4. If the population of a town increases by 15,793, it will become six lakh. What is its population now?

5. What must be added to 46 351 to get 60 220?
6. The sum of two numbers is 5 00 000. If one number is 45 678, find the other number.
7. What number must be subtracted from 3 02 005 to get 1 25 040?
8. By how much is 1 13 052 greater than 90 486?
9. 12 340 subtracted from a number gives 95 267. What is the number?
10. Rani had ₹ 8,20,100. After she bought a car, she had ₹ 78,950 left. What was the cost of the car?
11. Mahesh bought a plot of land for ₹ 4,50,000 and sold it later for ₹ 6,80,575. What was his profit?
12. A builder needed 7,42,500 kg of cement. He started buying cement. After a month he found that he was 2,72,854 kg short of what he needed. How much cement did he have then?

Mixed Addition and Subtraction

- Find $27\ 321 - 32\ 689 + 15\ 496$.

First add then subtract.
Subtract the number that
has the '-' sign in front.



1

$$\begin{array}{r} 2\ 7\ 3\ 2\ 1 \\ + 1\ 5\ 4\ 9\ 6 \\ \hline 4\ 2\ 8\ 1\ 7 \end{array}$$

2

$$\begin{array}{r} 4\ 2\ 8\ 1\ 7 \\ - 3\ 2\ 6\ 8\ 9 \\ \hline 1\ 0\ 1\ 2\ 8 \end{array}$$

Answer

- Find $1\ 524 - 672 + 35\ 893 - 30\ 240$.

- 1 Add the numbers that have the '-' sign in front.
2 Add the other numbers.
3 From their sum, subtract the sum of the '-' numbers.



1

$$\begin{array}{r} 3\ 0\ 2\ 4\ 0 \\ + 6\ 7\ 2 \\ \hline 3\ 0\ 9\ 1\ 2 \end{array}$$

2

$$\begin{array}{r} 3\ 5\ 8\ 9\ 3 \\ + 1\ 5\ 2\ 4 \\ \hline 3\ 7\ 4\ 1\ 7 \end{array}$$

Answer

2

$$\begin{array}{r} 3\ 7\ 4\ 1\ 7 \\ - 3\ 0\ 9\ 1\ 2 \\ \hline 6\ 5\ 0\ 5 \end{array}$$



Exercise 5D

Find

1. a. $25 + 46 - 45$ b. $383 + 74 - 189$ c. $4698 + 8332 - 5487$
2. a. $70 - 57 + 71$ b. $585 - 270 + 52$ c. $10104 - 7429 + 2245$
3. a. $300 - 268 - 15$ b. $10400 - 3645 - 363$ c. $120700 - 36347 - 415$
4. a. $118 - 2407 + 3615$ b. $5604 - 10518 + 7400$ c. $1380 - 11250 + 10720$
5. a. $503 - 45 + 1380 - 799$ b. $2374 - 1752 + 122318 - 90920$
6. a. $4256 - 15362 + 78100 - 280$ b. $10000 - 76365 + 207256 - 121804$

Word Sums

- In a school there were 1,450 students in the primary wing, 2,460 students in the middle wing and 3,460 students in the senior wing. How many more students are there in the primary and middle wings than the senior wing?

Students in the primary wing = 1450

Students in the middle wing = 2460

$$\begin{array}{r} \text{Total students} = 1450 + 2460 \\ = 3910 \end{array}$$

Additional students in the primary and middle

wing than the senior wing = $3910 - 3460$

$$= 450$$

\therefore 450 students are more than senior wing.

$$\begin{array}{r} 1\ 4\ 5\ 0 \\ + 2\ 4\ 6\ 0 \\ \hline 3\ 9\ 1\ 0 \end{array}$$

$$\begin{array}{r} 3\ 9\ 1\ 0 \\ - 3\ 4\ 6\ 0 \\ \hline 4\ 5\ 0 \end{array}$$

- The difference between two numbers is 26 868. If the greater of the two numbers is 45 412, find their sum.

The greater number = 45 412.

Difference between the numbers = 26 868.

$$\begin{array}{r} \text{The smaller number} = 45\ 412 - 26\ 868 \\ = 18\ 544. \end{array}$$

$$\begin{array}{r} \text{The sum of the numbers} = 45\ 412 + 18\ 544 \\ = 63\ 956. \end{array}$$

The sum of the two numbers = 63,956

$$\begin{array}{r} 4\ 5\ 4\ 1\ 2 \\ - 2\ 6\ 8\ 6\ 8 \\ \hline 1\ 8\ 5\ 4\ 4 \end{array}$$

$$\begin{array}{r} 4\ 5\ 4\ 1\ 2 \\ + 1\ 8\ 5\ 4\ 4 \\ \hline 6\ 3\ 9\ 5\ 6 \end{array}$$



Exercise 5E

- By how much is the sum of 92 746 and 78 218 greater than their difference?
- The sum of two numbers is 2 10 365. If one of them is 1 02 858, find their difference.
- The difference between two numbers is 14 937. If the greater of the two numbers is 59 002, find their sum.
- By how much is 1,23,671 greater than the sum of 35,465 and 72,255?
- Raj has ₹ 6,43,578. He wants to buy a machine that costs ₹ 9,05,000. How much should he borrow so that he is left with ₹ 25,000 after buying the machine?
- Mr Sharma spent ₹ 4,75,600 one year. The same year his wife spent ₹ 1,80,120 and his son spent ₹ 1,65,600. How much more did Mr Sharma spend than the total of the money spent by his wife and son?

Revision-1

1. Write using Roman numerals.

4	6	9	11	27	29	30	33	40	48

2. Fill in $>$, $<$ or $=$.

- a. IX XI b. CCC M c. 10×3 XIII d. $32 \div 8$ XXXVII

3. Write in figures.

- a. Fifty-six thousand four hundred and seventy-two
- b. Two lakh sixty thousand five hundred and seven
- c. Eighteen lakh three thousand and sixty-four
- d. Three lakh forty-eight thousand and nine
- e. Four crore five thousand two hundred and twenty-one



4. Write the predecessor.

- a. 23,783
- b. 50,000
- c. 65,800
- d. 1,00,000
- e. 3,49,000

5. Write the place value of the digits.

- | | | | |
|--------------|---------|---------|---------|
| a. 46,907 | 4 _____ | 6 _____ | 9 _____ |
| b. 62,743 | 3 _____ | 7 _____ | 6 _____ |
| c. 6,27,430 | 3 _____ | 7 _____ | 6 _____ |
| d. 9,87,245 | 9 _____ | 8 _____ | 4 _____ |
| e. 18,29,300 | 8 _____ | 1 _____ | 2 _____ |

6. Do these sums.

- a.

1 3 5 6 2 1	+ 7 2 9 8 6 4
- b.

8 6 3 1 4 0	+ 5 8 6 2 7
- c.

3 0 7 2 3 5	- 2 4 8 3 7 8
- d.

7 2 2 0 0 0	- 4 6 8 2 1 4
- e. $57341 + 25263 + 4395 + 52864$
- f. $10823 - 27687 + 425758 - 243764$

7. Fill in the missing digits.

- a.

4 8 3	+ 1 2 4
5 9 1 5 2	
- b.

5 9 3 4	+ 2 4 6 3
8 8 1 0 9	
- c.

4 2 5	- 2 8 6
1 9 2 1 2	
- d.

5 4 6 8	- 1 4 8 5 5
3 6 9	



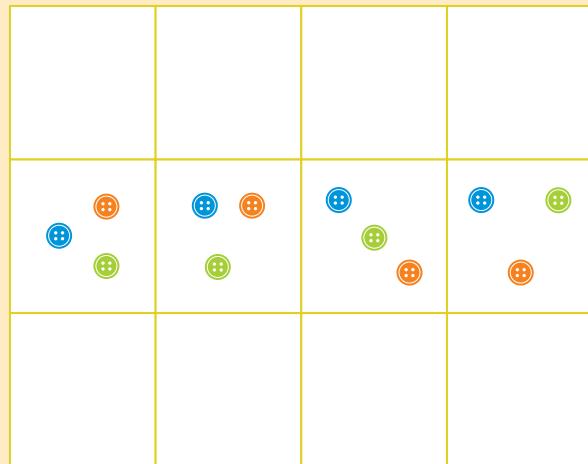
Do and Digest

Aim To review the concept of multiplication

Things needed Buttons/paper clips, a sheet of paper, pencil

Do and Learn

1. Make a grid on the sheet of paper, dividing it into blocks.
2. Put equal number of buttons/clip in a few blocks.
This gives you groups of buttons, with equal number of buttons in each.
3. Count the total number of buttons.
If you have 4 groups of 3 buttons, the total number of buttons = $3 + 3 + 3 + 3 = 12$.
We say: 4 three are 12, or 4 times three is 12.
We write $4 \times 3 = 12$.



Multiplication is the repeated addition of a number.

The result of multiplication is called the **product**.

In $4 \times 3 = 12$, 12 is the product of 4 and 3. And 4 and 3 are **factors** of 12.

6. Multiplication

Properties of Multiplication

Cut a sheet of squared paper to get 5 rows of 7 squares. Total number of squares = 35.

$$5 \times 7 = 35.$$

Turn the sheet as shown. Now you have 7 rows of 5 squares. The number of squares is still 35.

$$7 \times 5 = 35.$$

So, $5 \times 7 = 7 \times 5 = 35$.

	1	2	3	4	5	6	7
1							
2							
3							
4							
5							
6							
7							

$$5 \times 7 = 35$$

1	2	3	4	5
1				
2				
3				
4				
5				
6				
7				

$$7 \times 5 = 35$$



The product of numbers in any order is the same.



number $\times 0 = 0$
0 \times number = 0

$$15 \times 1 = 15$$

$$1 \times 15 = 15$$

number $\times 1 = \text{same number}$
1 \times number = same number

$$192 \times 0 = 0$$

$$0 \times 192 = 0$$

Answers to Selected Exercises

EXERCISE - 1A

1. (a) 887, 888, 889, 890, 891, 892, 893
 (b) 2506, 2507, 2508, 2509, 2510, 2511, 2512
 (c) 6784, 6785, 6786, 6787, 6788, 6789, 6790
2. (a) $2000 + 300 + 10 + 7$ (b) $3000 + 200 + 40 + 7$
 (c) $7000 + 200 + 0 + 8$ (d) $4000 + 0 + 50 + 0$
3. (a) > (b) < (c) < (d) <
4. (a) 2268, 3567, 4674, 6040, 7147
 (b) 6643, 7530, 7759, 7975, 8321
 (c) 2002, 2020, 2200, 3001, 3010
5. (a) 200, 4, 50 respectively
 (b) 900, 3000, 6 respectively
 (c) 4000, 60, 500 respectively
 (d) 11, 9, 7 respectively
 (e) VII, X, XI respectively
 (f) Four thousand two hundred and three
 (g) Eight thousand three hundred and twenty-eight
 (h) 8622 (i) 7030
6. (a) 168 (b) 207 (c) 2345 (d) 2038
 861 720 5432 8320
7. (a) 7432 (b) 6553 (c) 3639 (d) 1047
8. (a) 901 (b) 858 (c) 1710 (d) 6056
9. (a) 870 (b) 158 (c) 0 (d) 1387
10. (a) 1000 (b) 1020 (c) 11250 (d) 18480 (e) 6600
11. (a) 416 (b) 3328 (c) 6448 (d) 3996 (e) 22344
12. (a) Dividend = $18 \times 2 + 0 = 36$
 (b) Dividend = $15 \times 3 + 1 = 46$
 (c) Dividend = $7 \times 8 + 1 = 57$
 (d) Dividend = $5 \times 12 + 5 = 65$
13. (a) Q=73, R=0 (b) Q=715, R=3
 (c) Q=907, R=0 (d) Q=704, R=2

EXERCISE - 1B

1. (a) 
 (b) 
 (c) 
2. (a) T (b) F (c) T (d) T
 3. (a) F (b) T (c) F (d) T
 (e) T (f) F (g) T (h) T
4. (a) 10:50 (b) 2:25 (c) 8:15 (d) 3:45 (e) 9:10
5. (a) 0.25 (b) 1550 (c) 32 (d) 87.75 (e) 180
 (f) 48 (g) 28 (h) 90 (i) 300 (j) 336
 (k) 400 (l) 6 (m) 3 (n) 8000 (o) 6000
 (p) 4 (q) 2 (r) 3000
6. (a) 185 minutes (b) 106 hours (c) 165 days
 (d) 23 days (e) 3030 ml (f) 2 £ 543 ml
 (g) 4500 grams (h) 4 kg 255 g (i) 780 cm
 (j) 5 m 28 cm
7. (a) Rs 243.50 (b) Rs 1499.85 (c) Rs 52.25
 (d) Rs 7260.50 (e) Rs 248.15 (f) Rs 4096.50
 (g) Rs 9.05 (h) Rs 123.10
8. 3 kg 750 g 9. 2 km 100 m
 10. 168 ℥ 900 ml 11. 3 m 5 cm
12. (a) 16, 6 respectively
 (b) 18, 14 respectively
 (c) 54

EXERCISE - 2A

1. (a) 3, 5, 4, 9, 10, 11, 7, 12, 13, 20 respectively
 (b) 14, 17, 16, 19, 21, 23, 26, 27, 29, 30 respectively
 (c) 31, 33, 34, 37, 35, 40, 43, 45, 49, 50 respectively

2. (a) II, IV, V, VI, VIII, IX, X, XV, XVIII, XX
 (b) XXI, XXV, XVIII, XXIV, XXIX, XXVII, XXX, XXXI, XXXIII, XXXV
 (c) XXXIV, XXXVIII, XXXIX, XL, XLI, XLIII, XLIV, XLVI, XLVIII, XLIX
3. (a) < (b) < (c) > (d) < (e) <
 (f) < (g) < (h) < (i) >
4. (a) > (b) < (c) = (d) = (e) <
 (f) < (g) < (h) > (i) >
5. (a) IX < XIV < XV < XXIV < XXVI < XLI
 (b) X < XX < XXX < XL < L < C
 (c) XI < XIX < XXI < XXII < XXVII < XXX
6. (a) L > XL > XXX > XXIX > XIX > XVIII
 (b) XLVI > XLI > XXXIX > XXVIII > XIX > XVI
 (c) XXIX > XIX > XIII > XII > XI > X
7. (a) XXXV (b) VIII (c) XXIV (d) XXIV (e) XXX
 (f) XXV (g) XXV (h) XXVIII (i) LXIV

EXERCISE - 3A

1. (a) 55,555 (b) 6,42,315 (c) 45,36,789
 (d) 3,56,42,785 (e) 8,76,50,328 (f) 75,80,246
 (g) 9,75,030 (h) 46,082
2. (a) $2000000 + 500000 + 70000 + 9000 + 800 + 70 + 2$
 (b) $700000 + 80000 + 4000 + 200 + 90 + 5$
 (c) $60000 + 7000 + 400 + 50 + 2$
 (d) $700000 + 0 + 4000 + 200 + 90 + 6$
 (e) $9000000 + 900000 + 0 + 0 + 900 + 90 + 9$
 (f) $3000000 + 200000 + 0 + 0 + 0 + 0 + 0$
 (g) $40000000 + 6000000 + 300000 + 40000 + 8000 + 500 + 10 + 4$

	TC	C	TL	L	TTh	Th	H	T	O
3. (a)					6	0	5	2	4
(b)				3			4	7	4
(c)			5	4		1	6	4	7
(d)		8		0	0		0	0	0
(e)		4		8	1	3	2	1	8
(f)			1	1		1	7	0	1
(g)			6	9	0	7	2	0	1
(h)				2	9	9	1	7	9
(i)			2	8	0	0	3	5	4

	TC	C	TL	L	TTh	Th	H	T	O
(j)					2	0	2	0	2

	TC	C	TL	L	TTh	Th	H	T	O
(k)					1	8	5	6	7

EXERCISE - 3B

- 1.(a) 4, 30, 700, 6000, 20000 respectively
(b) 40000, 2000, 700, 60, 1 respectively
(c) 2, 60, 0, 9000, 700000 respectively
(d) 200000, 60, 50000, 900, 7000 respectively
(e) 4000000, 800000, 30000, 9000, 60 respectively
(f) 1, 20, 700, 6000, 8000000 respectively

- (g) 3000000, 200000, 40000, 6000, 700 respectively
 (h) 6000000, 7000, 900, 20, 3 respectively
 (i) 40000000, 50000, 8000, 200, 50 respectively

- 2.(a) thousands, ten thousands

- (b) lakhs, ten thousands
 - (c) ten thousands, lakhs
 - (d) 2, 20000
 - (e) 4, 400000
 - (f) 1, 4
 - (g) 3000000, 800000
 - (h) 600000, 70000
 - (i) 70000, 3000, 200

- | | | |
|---------|-------|-------|
| 3.(a) < | (b) > | (c) > |
| (d) > | (e) = | (f) > |
| (g) < | (h) > | (i) < |
| (j) > | (k) > | (l) = |

- 4.(a) 5657, 1244210
(b) 22600, 2234600
(c) 85070602, 87070702
(d) 5637, 22324226
(e) 52731, 5321052
(f) 908060, 40708090

- 5.(a) $44896 < 56789 < 63683 < 348792 < 445682$
(b) $680900 < 690900 < 7464523 < 7559270 < 8359258$
(c) $49470 < 3283704 < 3863929 < 23447509 < 26056479$
(d) $8888 < 89000 < 600900 < 8900000 < 9000600$
(e) $3640466 < 5967750 < 7065537 < 22335590 < 82532394$

- 6.(a) 7483920 > 4756659 > 2938940 > 29380 > 9290
(b) 9200000 > 37000 > 28000 > 26000 > 8000
(c) 4347500 > 3035395 > 2730350 > 923270 > 5050
(d) 65056606 > 3640460 > 26306 > 6200 > 666
(e) 7755962 > 4528693 > 849473 > 53952 > 798

- 7.(a) 97531, 13579
(b) 86420, 20468
(c) 987532, 235789
(d) 9776520, 2056779
(e) 85432100, 10023458

MathGym

EXERCISE - 4A

- | | | |
|--------------|------------|------------|
| 1.(a) 47997 | (b) 89889 | (c) 89989 |
| 2.(a) 699777 | (b) 998979 | (c) 489999 |
| 3.(a) 98888 | (b) 89986 | |
| (c) 887988 | (d) 898789 | |
| 4.(a) 58686 | (b) 78889 | |
| (c) 29989 | (d) 798999 | |
| 5.(a) 39698 | (b) 10638 | |
| (c) 3925 | (d) 520139 | |
| (e) 0 | (f) 0 | |
| (g) 74664 | | |

