

# Addition and Subtraction

## Check What I Know

### 1. Add.

$$\begin{array}{r} \text{a) } 4\ 5\ 6\ 7 \\ + 3\ 2\ 9\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b) } 7\ 6\ 8\ 0 \\ + 2\ 0\ 3\ 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c) } 5\ 3\ 6\ 8 \\ + 4\ 7\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d) } 6\ 9\ 0\ 7 \\ \quad 9\ 8 \\ + 2\ 0\ 0\ 5 \\ \hline \end{array}$$

### 2. Subtract.

$$\begin{array}{r} \text{a) } 4\ 8\ 0\ 7 \\ - 4\ 2\ 9\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b) } 7\ 7\ 3\ 0 \\ - 4\ 0\ 4\ 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c) } 5\ 0\ 1\ 0 \\ - 5\ 6\ 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d) } 6\ 0\ 0\ 0 \\ - 2\ 0\ 9\ 8 \\ \hline \end{array}$$

### 3. Answer the following questions.

- If  $4562 + 1324 = 5886$ , what is  $5886 - 4562$ ? \_\_\_\_\_
- If  $6523 - 5754 = 769$ , is  $5754 - 6523$  also equal to 769? \_\_\_\_\_
- If  $1346 + 3824 = 5170$ , is  $3824 + 1346$  also equal to 5170? \_\_\_\_\_
- What is  $5025 + 0$  equal to? \_\_\_\_\_
- What is  $5025 - 0$  equal to? \_\_\_\_\_
- What is  $5025 - 5025$  equal to? \_\_\_\_\_

4. There are 3412 students in the junior section of a school and 2446 students in the senior section.

- How many students are there in all in the school?
- Which section has more students? How many more?

- 5348 books were displayed at a book fair. Of this, 2067 books were in English. How many books were not in English?
- The difference between two numbers is 1234. If the bigger number is 4321, what is the other number?



## Addition of 4-digit numbers

Sometimes when you add 4-digit numbers, you get a 5-digit answer.

**Example:** Add 6543 and 7676.

**Step 1:** Add the ones.

$$3 + 6 = 9$$

**Step 2:** Add the tens and regroup.

$$4 + 7 = 11$$

$$11 \text{ tens} = 1 \text{ hundred} + 1 \text{ ten}$$

**Step 3:** Add the hundreds and regroup.

$$1 + 5 + 6 = 12$$

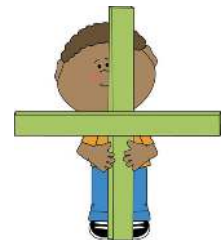
$$12 \text{ hundreds} = 1 \text{ thousand} + 2 \text{ hundreds}$$

**Step 4:** Add the thousands and regroup.

$$1 + 6 + 7 = 14$$

$$14 \text{ thousands} = 1 \text{ ten thousand} + 4 \text{ thousands}$$

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



## EXERCISE 1

### 1. Add.

a) 
$$\begin{array}{r} 4683 \\ + 6397 \\ \hline \end{array}$$



b) 
$$\begin{array}{r} 5076 \\ + 4937 \\ \hline \end{array}$$



c) 
$$\begin{array}{r} 7777 \\ + 3333 \\ \hline \end{array}$$



d) 
$$\begin{array}{r} 9367 \\ + 2755 \\ \hline \end{array}$$



### 2. Add.

a)  $3868 + 6967$

b)  $7081 + 5539$

c)  $4038 + 9999$

d)  $6789 + 9876$

- Magan's parents bought a refrigerator for ₹ 6578 and a television for ₹ 4309. How much money did they spend?

4. A flight left New Delhi and flew 6707 km to London in 8 hours 10 minutes. It then travelled 5576 km from London to New York in 7 hours 20 minutes. What is the distance it travelled from New Delhi to New York? (Hint: There is some extra information in the sum which you do not require.)

## Addition of 5-digit numbers

Addition of 5-digit numbers is done in the same way as addition of 4-digit numbers.

Write the numbers one below the other according to place values.

Add in order: ones → tens → hundreds → thousands → ten thousands.

Regroup where required.

**Example 1:** Add 23,458 and 18,533.

|   |    |    |   |   |   |  |
|---|----|----|---|---|---|--|
| T | Th | Th | H | T | O |  |
|   |    |    |   | 1 |   |  |
| 2 | 3  | 4  | 5 | 8 | 8 |  |
| + | 1  | 8  | 5 | 3 | 3 |  |
|   |    |    |   | 1 |   |  |

|   |    |    |   |   |   |  |
|---|----|----|---|---|---|--|
| T | Th | Th | H | T | O |  |
|   |    |    |   | 1 |   |  |
| 2 | 3  | 4  | 5 | 8 | 8 |  |
| + | 1  | 8  | 5 | 3 | 3 |  |
|   |    |    | 9 | 1 |   |  |

|   |    |    |   |   |   |  |
|---|----|----|---|---|---|--|
| T | Th | Th | H | T | O |  |
|   |    |    |   | 1 |   |  |
| 2 | 3  | 4  | 5 | 8 | 8 |  |
| + | 1  | 8  | 5 | 3 | 3 |  |
|   |    | 9  | 9 | 1 |   |  |

|   |    |    |   |   |   |  |
|---|----|----|---|---|---|--|
| T | Th | Th | H | T | O |  |
| 1 |    |    |   | 1 |   |  |
| 2 | 3  | 4  | 5 | 8 | 8 |  |
| + | 1  | 8  | 5 | 3 | 3 |  |
| 4 | 1  | 9  | 9 | 1 |   |  |

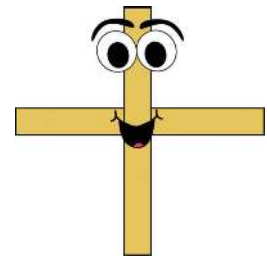
|   |    |    |   |   |   |  |
|---|----|----|---|---|---|--|
| T | Th | Th | H | T | O |  |
| 1 |    |    |   | 1 |   |  |
| 2 | 3  | 4  | 5 | 8 | 8 |  |
| + | 1  | 8  | 5 | 3 | 3 |  |
| 1 | 9  | 9  | 1 |   |   |  |

**Answer :** 41,991

**Example 2:** Add 36,436, 4597 and 18,099.

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

**Answer :** 59,132



## EXERCISE 2

### 1. Add.

|    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |   |
|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|---|
| a) | 2 | 4 | 3 | 1 | 4 | b) | 6 | 4 | 0 | 2 | 4 | c) | 5 | 4 | 3 | 9 | 0 | d) | 2 | 3 | 6 | 5 | 9 |   |
|    | + | 3 | 7 | 8 | 8 | 6  | + | 2 | 6 | 8 | 9 | 6  | + | 3 | 7 | 3 | 1 | 8  | + | 3 | 1 | 6 | 4 | 3 |
|    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |    |   |   |   |   |   |   |

## 2. Add.

a)  $42,357 + 37,429$

b)  $44,229 + 2789$

c)  $41,362 + 38,653$

d)  $32,053 + 8607 + 51,640$

3. Every month Parul's mother deposits some money in the bank. She deposited ₹ 12,980 in January and ₹ 15,880 in February. How much money did she deposit in the two months?

4. In a village there are 45,356 men. The number of women is 2879 more than the number of men. How many women are there in the village?

5. Daya attended college in Mumbai. His parents calculated that they needed ₹ 26,880 for tuition fee, ₹ 15,450 for hostel fee and ₹ 10,800 for transport and other things, every year. How much money do Daya's parents need in a year for Daya's college education?

6. In a town there are 34,560 men, 32,169 women and 9876 children. What is the population of the town?



## Subtraction of 5-digit numbers

Subtraction of 5-digit numbers is done in the same way as subtraction of 4-digit numbers.

Write the numbers one below the other according to place values, with the greater number on top.

Subtract in order: ones → tens → hundreds → thousands → ten thousands. Regroup where required.

**Example 1:** Subtract 26,068 from 65,347.

|     |    |    |              |              |    |     |    |              |              |              |    |     |    |              |              |              |    |
|-----|----|----|--------------|--------------|----|-----|----|--------------|--------------|--------------|----|-----|----|--------------|--------------|--------------|----|
| T   | Th | Th | H            | T            | O  | T   | Th | Th           | H            | T            | O  | T   | Th | Th           | H            | T            | O  |
|     |    |    |              | 3            | 17 |     |    |              | 2            | 13           | 17 |     |    |              | 2            | 13           | 17 |
| 6   | 5  | 3  | <del>4</del> | <del>7</del> |    | 6   | 5  | <del>3</del> | <del>4</del> | <del>7</del> |    | 6   | 5  | <del>3</del> | <del>4</del> | <del>7</del> |    |
| - 2 | 6  | 0  | 6            | 8            |    | - 2 | 6  | 0            | 6            | 8            |    | - 2 | 6  | 0            | 6            | 8            |    |
|     |    |    |              | 9            |    |     |    |              | 7            | 9            |    |     |    |              | 2            | 7            | 9  |

|              |              |              |              |              |   |              |              |              |              |              |   |
|--------------|--------------|--------------|--------------|--------------|---|--------------|--------------|--------------|--------------|--------------|---|
| T            | Th           | Th           | H            | T            | O | T            | Th           | Th           | H            | T            | O |
| 5            | 15           | 2            | 13           | 17           |   | 5            | 15           | 2            | 13           | 17           |   |
| <del>6</del> | <del>5</del> | <del>3</del> | <del>4</del> | <del>7</del> |   | <del>6</del> | <del>5</del> | <del>3</del> | <del>4</del> | <del>7</del> |   |
| - 2          | 6            | 0            | 6            | 8            |   | - 2          | 6            | 0            | 6            | 8            |   |
| 3            | 9            | 2            | 7            | 9            |   |              | 9            | 2            | 7            | 9            |   |

**Answer :** 39,279

### Rapid check

Complete the subtraction.

$$\begin{array}{r} \phantom{0} 5 \phantom{0} 6 \phantom{0} 8 \phantom{0} 4 \phantom{0} 3 \\ - 2 \phantom{0} 7 \phantom{0} 9 \phantom{0} 6 \phantom{0} 8 \\ \hline \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} 5 \end{array}$$

## Subtraction with zeroes

**Example 2:** Subtract 45,678 from 90,000.

To subtract the ones, you have to regroup. There are no tens, hundreds or thousands in the bigger number. So you have to regroup the ten thousands.

|   |   |  |   |   |   |   |
|---|---|--|---|---|---|---|
| Regroup<br>ten thousands  | → | Regroup<br>thousands   | → | Regroup<br>hundreds   | → | Regroup tens<br>and subtract  |
| $\begin{array}{r} 8 \phantom{0} 10 \phantom{0} 0 \phantom{0} 0 \phantom{0} \\ \cancel{9} \cancel{0} \phantom{0} \phantom{0} \phantom{0} \\ - 4 \phantom{0} 5 \phantom{0} 6 \phantom{0} 7 \phantom{0} 8 \\ \hline \end{array}$ |   | $\begin{array}{r} 8 \phantom{0} \cancel{9} \phantom{0} 10 \phantom{0} 0 \phantom{0} 0 \\ \cancel{9} \cancel{0} \phantom{0} \phantom{0} \phantom{0} \\ - 4 \phantom{0} 5 \phantom{0} 6 \phantom{0} 7 \phantom{0} 8 \\ \hline \end{array}$ |   | $\begin{array}{r} 8 \phantom{0} \cancel{9} \phantom{0} \cancel{9} \phantom{0} 10 \phantom{0} 0 \\ \cancel{9} \cancel{0} \cancel{0} \cancel{0} \phantom{0} \\ - 4 \phantom{0} 5 \phantom{0} 6 \phantom{0} 7 \phantom{0} 8 \\ \hline \end{array}$ |   | $\begin{array}{r} 8 \phantom{0} \cancel{9} \phantom{0} \cancel{9} \phantom{0} \cancel{9} \phantom{0} 10 \\ \cancel{9} \cancel{0} \cancel{0} \cancel{0} \cancel{0} \\ - 4 \phantom{0} 5 \phantom{0} 6 \phantom{0} 7 \phantom{0} 8 \\ \hline 4 \phantom{0} 4 \phantom{0} 3 \phantom{0} 2 \phantom{0} 2 \end{array}$ |

Note: See Problem Solving at the end of the lesson for an easier method of subtraction with zeroes.

## Checking subtraction by adding

To check the answer to a subtraction problem, add the difference to the smaller number. If your answer is correct, you will get the greater number.



**Example 3:** Check:

$$56,843 - 27,968 = 28,875$$

Check: Difference + smaller number = greater number

$$28,875 + 27,968 = 56,843$$

Therefore the answer is correct.

Check

$$\begin{array}{r} \phantom{0} 1 \phantom{0} 1 \phantom{0} 1 \phantom{0} 1 \\ \phantom{0} 2 \phantom{0} 8 \phantom{0} 8 \phantom{0} 7 \phantom{0} 5 \\ + \phantom{0} 2 \phantom{0} 7 \phantom{0} 9 \phantom{0} 6 \phantom{0} 8 \\ \hline \phantom{0} 5 \phantom{0} 6 \phantom{0} 8 \phantom{0} 4 \phantom{0} 3 \end{array}$$

## EXERCISE 3

**1. Subtract.** In each case, check the answer by addition.

a)

$$\begin{array}{r} 5 \phantom{0} 8 \phantom{0} 7 \phantom{0} 3 \phantom{0} 2 \\ - 2 \phantom{0} 6 \phantom{0} 5 \phantom{0} 8 \phantom{0} 2 \\ \hline \end{array}$$

b)

$$\begin{array}{r} 8 \phantom{0} 3 \phantom{0} 6 \phantom{0} 0 \phantom{0} 2 \\ - 5 \phantom{0} 7 \phantom{0} 9 \phantom{0} 8 \phantom{0} 9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c) } 6 \ 0 \ 4 \ 6 \ 3 \\ - 2 \ 0 \ 0 \ 6 \ 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d) } 6 \ 0 \ 0 \ 0 \ 0 \\ - 2 \ 7 \ 5 \ 3 \ 5 \\ \hline \end{array}$$

2. a) Subtract 4990 from 55,434                      b) Subtract 12,345 from 50,000  
 c) Find the difference between 23,000 and 9999.  
 d) Find the difference between 35,287 and 47,363.
3. In an election, candidate A got 2458 votes less than candidate B. If candidate B got 85,765 votes, how many votes did candidate A get?
4. 50,000 copies of a book have to be printed and bound. In a week, 25,540 books were completed. How many are left?
5. The population of Karimganj is 23,678. The population of Azamgarh is 46,567. Which town has a larger population? How much more?
6. Mr Khanna had ₹ 20,000 in his bank account. He took out ₹ 10,855 to buy a sofa. How much money is left in his bank account?



## Combining addition and subtraction

**Example:**  $4672 - 2418 + 9345$

**Step 1:** Add the first number to the number with the + sign before it.

**Step 2:** From the sum, subtract the number with the - sign before it.

$$\begin{array}{r} 4 \ 6 \ 7 \ 2 \\ + 9 \ 3 \ 4 \ 5 \\ \hline 1 \ 4 \ 0 \ 1 \ 7 \end{array} \quad \begin{array}{r} 1 \ 4 \ 0 \ 1 \ 7 \\ - 2 \ 4 \ 1 \ 8 \\ \hline 1 \ 1 \ 5 \ 9 \ 9 \end{array}$$

## EXERCISE 4

### 1. Solve.

- a)  $7763 + 4594 - 306 = \underline{\hspace{2cm}}$                       b)  $3365 - 1302 + 2304 = \underline{\hspace{2cm}}$   
 c)  $9896 - 2723 + 6516 = \underline{\hspace{2cm}}$                       d)  $2335 + 1545 - 3666 = \underline{\hspace{2cm}}$   
 e)  $2405 - 1209 + 3568 = \underline{\hspace{2cm}}$                       f)  $5000 - 1234 + 3000 = \underline{\hspace{2cm}}$

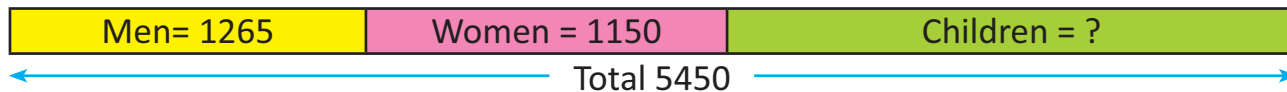
Another way of finding the answer to a sum like  $3365 - 1302 + 2304$  is to first do the subtraction  $(3365 - 1302)^*$  and then add the answer to 2304. You will get the same answer.



\*Bigger numbers should not be subtracted from smaller numbers.

2. On Saturday evening 5450 people visited India Gate. Out of these 1265 were men, 1150 were women and the rest were children. How many children visited India Gate?

Hint: see the figure.



3. Mr Gopal earns ₹ 24,375 per month. Mrs Gopal earns ₹ 20,785 per month. They spend ₹ 30,500 in a month. How much money do they save every month?

## Addition and subtraction of money

You have learnt addition and subtraction of money in Class 3. Recall that to add or subtract, you have to:

- write the money amounts one below the other, taking care that the decimal points lie one below the other.
- add or subtract in the usual way, just as you add or subtract other numbers.
- take care to put the decimal point in the correct place—just below the other decimal points.

$$\begin{array}{r} \phantom{₹} 11 \\ ₹ 24.50 \\ + ₹ 36.65 \\ \hline ₹ 61.15 \end{array}$$

$$\begin{array}{r} \phantom{₹} 10 \\ 50 \phantom{0} 11 \\ ₹ \cancel{61.15} \\ - ₹ 24.50 \\ \hline ₹ 36.65 \end{array}$$

**Example 1:** Add ₹ 234.75, ₹ 48.25 and ₹ 123.50.

$$\begin{array}{r} \phantom{₹} 1111 \\ 234.75 \\ \phantom{₹} 48.25 \\ + 123.50 \\ \hline ₹ 406.50 \end{array}$$

**Answer:** ₹ 406.50

*Rapid check*

$$\begin{array}{r} 353.65 \\ 128.75 \\ + 42.50 \\ \hline \end{array}$$

**Example 2:** Subtract ₹ 175.25 from ₹ 200.00.

$$\begin{array}{r} \phantom{₹} 999 \\ 1 \cancel{00} \cancel{0} \phantom{0} \cancel{0} \cancel{0} \\ - 175.25 \\ \hline ₹ 24.75 \end{array}$$

**Answer:** ₹ 24.75

*Rapid check*

$$\begin{array}{r} 500.00 \\ - 395.75 \\ \hline \end{array}$$

**Example 3:** Ramesh bought a few items from the school bookshop. The shopkeeper gave him a bill. But he forgot to put the total amount.

- Find the total amount Ramesh has to pay.
- If Ramesh gave the shopkeeper two ₹ 100 notes, how much will he get back as change?

| SHYAM STATIONERY SHOP |          |          |
|-----------------------|----------|----------|
| Bill                  |          |          |
| Item                  | Quantity | Cost     |
| Maths book            | 1        | ₹ 112.50 |
| Maths notebook        | 1        | ₹ 24.75  |
| Pencil box            | 1        | ₹ 15.25  |
| Eraser                | 1        | ₹ 3.50   |
| <b>TOTAL</b>          |          |          |

## EXERCISE 5

- Parul bought a pair of shoes for ₹ 145.95 and a pair of socks for ₹ 36.50. How much money did she spend?
- Nina had ₹ 100. She spent ₹ 91.75 on food. How much money is left with her?
- Anwar bought his school uniform from Mangat Dress House. Find the total amount to be paid. If Anwar gave the shopkeeper one ₹ 500, one ₹ 100 and one ₹ 50 note, how much change did he get back?

| MANGAT DRESS HOUSE |          |          |
|--------------------|----------|----------|
| Bill               |          |          |
| Item               | Quantity | Cost     |
| Shirt              | 1        | ₹ 240.00 |
| Trouser            | 1        | ₹ 350.50 |
| Tie                | 1        | ₹ 45.25  |
| <b>TOTAL</b>       |          |          |

- Make the bill and find the total amount spent on the following things.

1 kg sugar for ₹ 35.50

500 g cashew for ₹ 450.25

100 g biscuits for ₹ 54.75

If the amount paid is ₹ 600, what is the change received?

| KALU GROCERY SHOP |          |       |
|-------------------|----------|-------|
| Bill              |          |       |
| Item              | Quantity | Cost  |
|                   |          |       |
|                   |          |       |
| <b>TOTAL</b>      |          | _____ |

- Nasim spent ₹ 13.50. He had ₹ 11.50 left. How much money did he start with?
- Payal wants to buy a skirt that costs ₹ 123.95. She has only ₹ 93.00. How much more money does she need to buy the skirt?





# Mixed Bag

(Concept, skill, application and thinking based)

## 1. Choose the correct answer.

- a) If  $38,666 - 27,345 = 11,321$ , which of the following is true?  
i.  $38,666 + 11,321 = 27,345$       ii.  $38,666 - 11,321 = 27,345$   
iii.  $27,345 - 11,321 = 38,666$       iv. Both ii and iii
- b) If  $27,305 + 12,327 = 39,632$ , which of the following is true?  
i.  $39,632 - 12,327 = 27,305$       ii.  $39,632 - 27,305 = 12,327$   
iii.  $12,327 + 27,305 = 39,632$       iv. All of these
- c) If a number is added to itself, the answer is:  
i. 0    ii. 1    iii. Double the number    iv. Half of the number
- d) If a number is subtracted from itself, the answer is:  
i. 0    ii. 1    iii. Double the number    iv. Half of the number

## 2. Add or subtract as required, in your notebook.

- a)  $56,942 + 19,370$       b)  $56,709 + 5798$   
c)  $56,789 - 26,798$       d)  $73,657 - 3709$   
e)  $9842 + 23,679$       f)  $43,509 + 3640 + 12,563$   
g)  $92,400 - 11,678$       h)  $53,000 - 37,987$   
i) Add 36,532 to 53,849      j) Add 4381, 52,324 and 25,426  
k) Subtract 32,824 from 51,600      l) Subtract 13,876 from 36,232  
m) Add 21,987 to 59,909      n) Add 47,032 to the sum of 19,474 and 5760  
o) Find the difference between 63,569 and 64,679      p) Find the difference between 40,000 and 9999

## 3. Applying addition and subtraction (Story sums)

- a) Mr Grover bought a car. He paid ₹ 18,670 from his savings. He took a loan of ₹ 55,450 from a bank to pay the rest of the money. What was the cost of the car?



b) Anand bought a television set and a music system for ₹ 86,499. The cost of the television set was ₹ 45,789. What was the cost of the music system?



c) For a wedding, the decoration was done only with yellow and golden marigold flowers. 32,456 yellow and 57,544 golden marigolds were used. How many flowers were used in all?



d) The Kalra family went on a tour of Kerala. They spent ₹ 8556 on travelling, ₹ 7500 on food and ₹ 6780 on their stay. How much money did they spend in all?

e) The population of Town A is 34,325. The population of Town B is 34,750. Which town has a larger population? How much more?

f) A car company produced 95,556 cars in a year. They sold 84,324 cars. How many cars were left unsold?



g) Mr Mani bought a car in 2013. It ran 12,869 km in 2013 and 23,632 km in 2014. How many kilometres did it run in all in the two years?

h) The population of a town in 2013 was 38,250. It increased to 42,703 in 2014. Find the increase in population.

i) There were 12,456 bags of wheat in a godown. 3578 bags were taken out on Monday, and 4576 were taken out on Tuesday. How many bags of wheat remain in the godown?



j) From a wire 30,000 m long, two pieces of 12,455 m and 10,455 m were cut. Find the length of the remaining wire.

#### 4. Applying addition and subtraction (Story sums)

a) How much change will be returned if Akash buys a pack of 4 chocolate bars for ₹ 86.95 and pays the shopkeeper ₹ 100?



b) Anuradha buys chocolates for ₹ 25.75, biscuits for ₹ 28.50 and ice-cream for ₹ 28.75. How much money did she spend? If she pays with one ₹ 100 note, how much change does she get back?

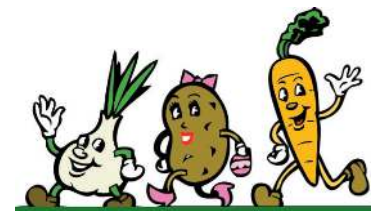
c) Make the bill for the following items and find the amount spent.

1 kg potatoes for ₹ 12.75

1 kg onions for ₹ 25.75

$\frac{1}{2}$  kg beans for ₹ 15.50

$\frac{1}{2}$  kg cauliflower for ₹ 10.00



If a ₹ 500 note is given to the shopkeeper, how much will he return?

# Mental Maths



FA

Here are some quick methods of adding and subtracting certain types of numbers, by breaking up one of the numbers.

1. Add 1258 and 18.

Break up 18 as:  $18 = 20 - 2$

Therefore, to add 18, first add 20 then subtract 2.

$$1258 + 20 = 1278$$

$$1278 - 2 = \mathbf{1276}$$

2. Add 3452 and 23.

$23 = 20 + 3$

To add 23, first add 20 then add 3.

$$3452 + 20 = 3472$$

$$3472 + 3 = \mathbf{3475}$$

3. Subtract 19 from 1358.

$19 = 20 - 1$

To subtract 19, first subtract 20, then add 1.

$$1358 - 20 = 1338$$

$$1338 + 1 = \mathbf{1339}$$

4. Subtract 32 from 4397.

$32 = 30 + 2$

To subtract 32, first subtract 30, then subtract 2.

$$4397 - 30 = 4367$$

$$4367 - 2 = \mathbf{4365}$$

## Work out the following mentally.

a)  $1617 + 19 = \underline{\quad}$

b)  $2833 + 18 = \underline{\quad}$

c)  $1238 + 27 = \underline{\quad}$

d)  $2418 + 21 = \underline{\quad}$

e)  $3317 + 22 = \underline{\quad}$

f)  $2856 + 33 = \underline{\quad}$

g)  $2639 - 28 = \underline{\quad}$

h)  $4166 - 39 = \underline{\quad}$

i)  $1639 - 17 = \underline{\quad}$

j)  $2897 - 32 = \underline{\quad}$

k)  $6528 - 23 = \underline{\quad}$

l)  $3895 - 43 = \underline{\quad}$

# Hots



FA

## Fill in the blanks.

a) 
$$\begin{array}{r} 5 \quad 6 \quad 9 \quad 1 \quad 6 \\ - \quad \square \quad \square \quad 1 \quad \square \quad 3 \\ \hline 2 \quad 0 \quad \square \quad 7 \quad \square \end{array}$$

b) 
$$\begin{array}{r} 4 \quad \square \quad 5 \quad \square \quad 3 \\ - 3 \quad 6 \quad \square \quad 5 \quad \square \\ \hline \square \quad 0 \quad 0 \quad 0 \quad 0 \end{array}$$

$$\begin{array}{r}
 \text{c) } 7 \quad 2 \quad 3 \quad 1 \quad 5 \\
 - \quad \square \quad 2 \quad \square \quad 2 \quad \square \\
 \hline
 2 \quad \square \quad 6 \quad \square \quad 3
 \end{array}$$

$$\begin{array}{r}
 \text{d) } 7 \quad \square \quad 5 \quad \square \quad 5 \\
 - 3 \quad 5 \quad 2 \quad 7 \quad 3 \\
 \hline
 \square \quad 5 \quad \square \quad 4 \quad \square
 \end{array}$$

## Problem Solving



FA

Study this pattern.

$$\begin{array}{r}
 10 \\
 - 7 \\
 \hline
 \end{array}
 \text{ is the same as }
 \begin{array}{r}
 9 \\
 - 6 \\
 \hline
 \end{array}
 \text{ (1 subtracted from both numbers)}$$

$$\begin{array}{r}
 200 \\
 - 56 \\
 \hline
 \end{array}
 \text{ is the same as }
 \begin{array}{r}
 199 \\
 - 55 \\
 \hline
 \end{array}
 \text{ (1 subtracted from both numbers)}$$

Let us use this pattern to work out  $5000 - 2456$  more easily.

$$\begin{array}{r}
 4999 \\
 - 2455 \\
 \hline
 2544
 \end{array}
 \text{ is easier to subtract than }
 \begin{array}{r}
 \overset{9}{4} \overset{9}{10} \overset{9}{10} \overset{9}{10} \\
 5000 \\
 - 2456 \\
 \hline
 2544
 \end{array}$$

Use this method to find out:

a)  $80,000 - 52,368$

b)  $70,000 - 40,379$

## Life Skill



FA

Often when you go shopping, you have to estimate the amount of money you should carry. You can do this by rounding off and adding.

You want to buy a pen (approx. ₹ 15), a book (approx. ₹ 85) and a notebook (approx. ₹ 18). How much money should you carry?



Rounding off and adding: ₹ 15 + ₹ 85 + ₹ 18 → ₹ 20 + ₹ 90 + ₹ 20 = ₹ 130

1. Estimate the sum by rounding off .

a)  $23 + 56 + 78 + 16$  (to nearest 10)      b)  $145 + 260 + 375$  (to nearest 100)

2. Estimate the sum of money you should carry with you when you go shopping for these items.

Mangoes – ₹ 66, bananas – ₹ 35, pears – ₹ 58, oranges – ₹ 45

(approx. means approximately)

Remember that when you are estimating the amount of money to carry, it is better to round up rather than round down. Having more money is not such a problem when you go shopping, as falling short of money!

## Cross-curricular Questions



FA

The lengths of some important rivers in India are as follows:

Ganga: 2620 km

Brahmaputra: 2950 km

Narmada: 1290 km

Yamuna: 1370 km

Godavari: 1465 km

Krishna: 1300 km

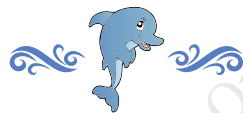


Which is the longest river in India?

How much longer is it than the second longest river?

Write the lengths of the rivers correct to the nearest 100 km.

## Fun Activity



FA

### Magic square

A magic square should have the same total horizontally, vertically and diagonally.

Fill in the blanks to complete the magic square.

|    |    |    |
|----|----|----|
| 7  | 14 | 9  |
| 12 |    | 8  |
|    | 6  | 13 |

## Project



FA

Find out the lengths of the 10 longest rivers in the world. For this you can go to the website: [http://en.wikipedia.org/wiki/List\\_of\\_rivers\\_by\\_length](http://en.wikipedia.org/wiki/List_of_rivers_by_length)

Compare the lengths of the longest river in the world with the longest river in India.