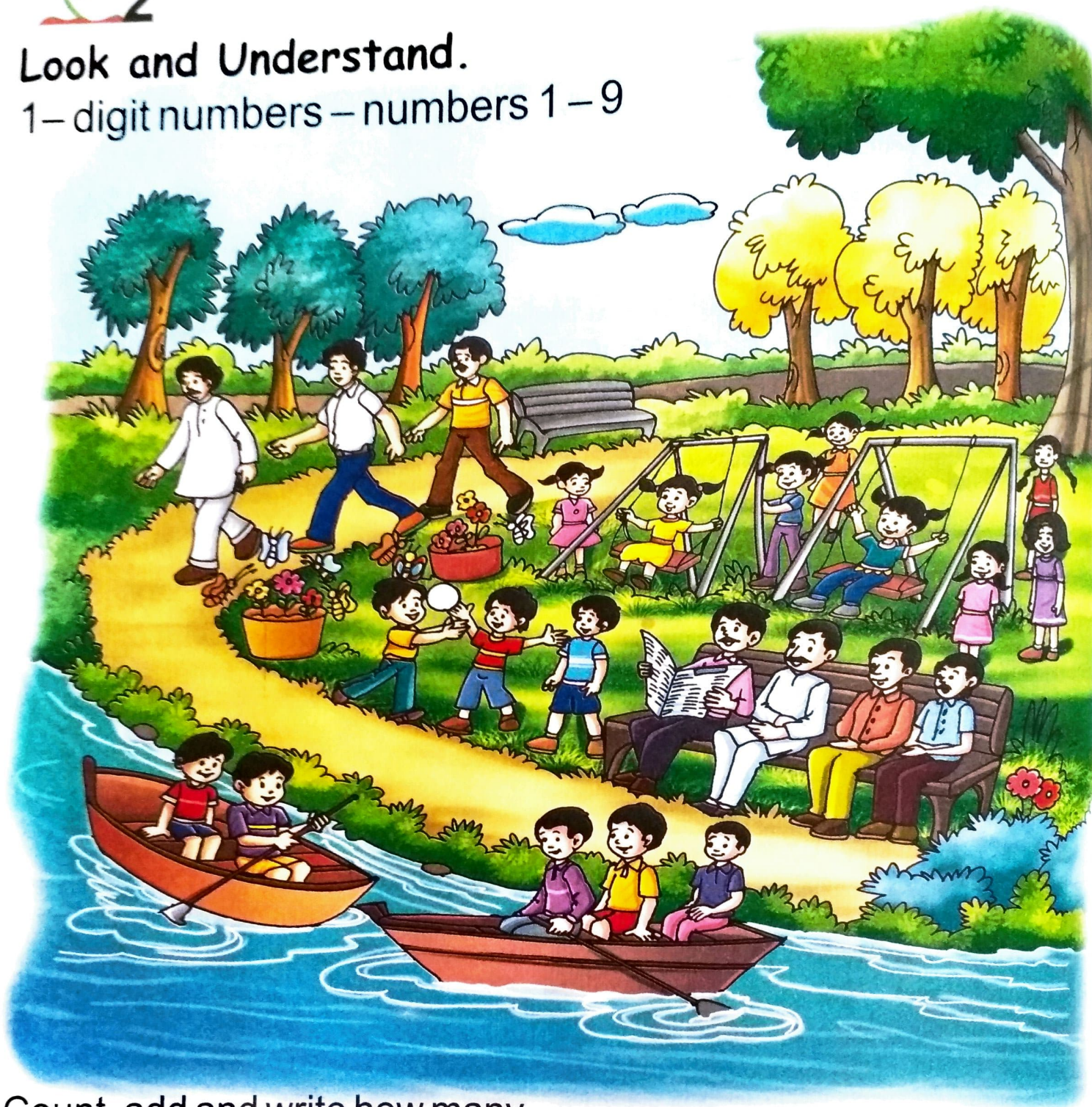


Look and Understand.

1-digit numbers – numbers 1 – 9



Count, add and write how many

|   |                        |   |   |                       |   |   |              |
|---|------------------------|---|---|-----------------------|---|---|--------------|
| 4 | Green trees            | + | 3 | non green trees       | = | 7 | trees.       |
| 2 | Orange butterflies     | + | 1 | yellow butterflies    | = | 3 | butterflies. |
| 4 | People on one bench    | + | 0 | people on other bench | = | 4 | people.      |
| 3 | People in one boat     | + | 2 | people in other boats | = | 5 | people.      |
| 2 | Girls on the swings    | + | 6 | girls waiting         | = | 8 | girls.       |
| 3 | Boys playing with ball | + | 6 | girls not on swings   | = | 9 | children.    |

# Concept of Addition

Addition means putting things together

We use '+' sign to add two numbers.

We use '=' sign to show equal to or the same as.

The number we get after addition is **sum**.

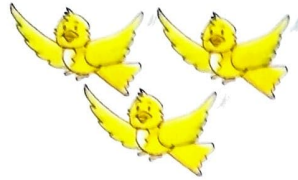
Example:



2

and

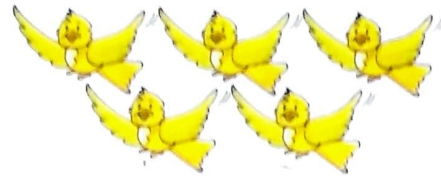
+



3

is

=



5

Count and write how many in all.



and

is

$$2 + 3 = 5$$



and

is

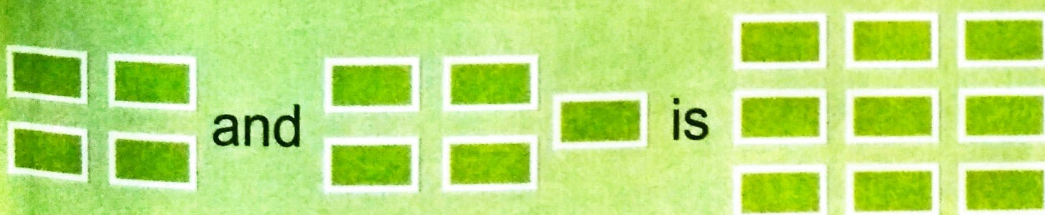
$$3 + 4 = 7$$



and

is

$$5 + 1 = 6$$



and

is

$$4 + 5 = 9$$

## Adding Zero:



Pranav has two flowers



Vinni gives him nothing



Pranav still has two flowers

$$2 + 0 = 2$$

When we add zero to a number we get the same number.



4

+



=



+

0

=

4

Add and fill in the boxes

$$3 + 0 = 3$$

$$4 + 0 = 4$$

$$2 + 0 = 2$$

$$6 + 0 = 6$$

$$5 + 0 = 5$$

$$1 + 0 = 1$$

$$9 + 0 = 9$$

$$8 + 0 = 8$$

$$7 + 0 = 7$$

## Adding One:



Ritika has two sandwiches.



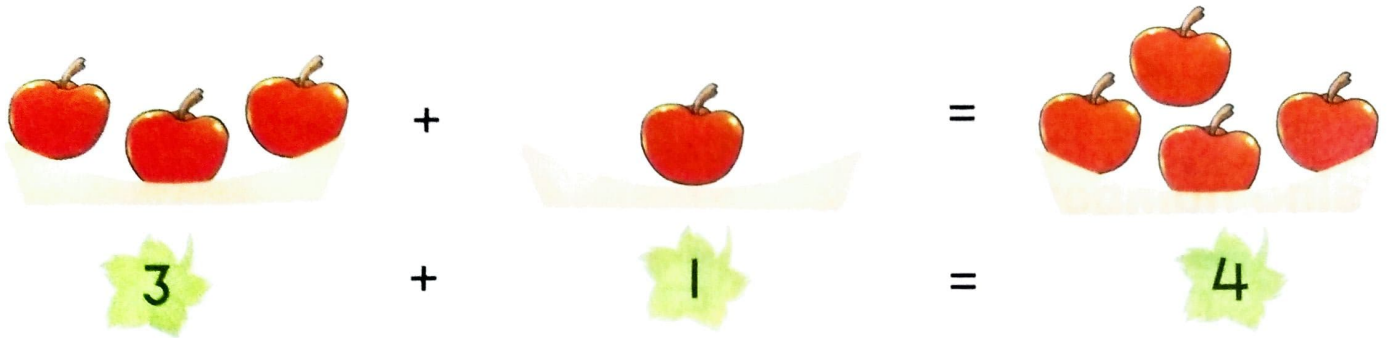
Vishu gives her one more



Ritika now has three sandwiches

$$2 + 1 = 3$$

When we add one to a number we get the number just after it.



Add and fill in the boxes

$$4 + 1 = 5$$

$$5 + 1 = 6$$

$$3 + 1 = 4$$

$$9 + 1 = 10$$

$$6 + 1 = 7$$

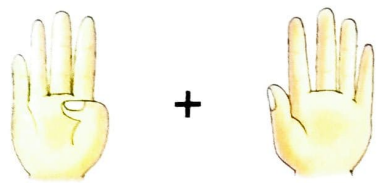
$$1 + 1 = 2$$

$$2 + 1 = 3$$

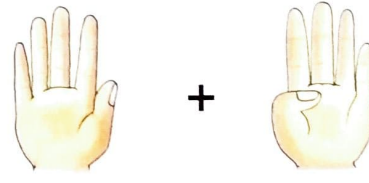
$$8 + 1 = 9$$

$$7 + 1 = 8$$

## Order in Addition



$$4 + 5 = 9$$



$$5 + 4 = 9$$

When we change the order of the numbers their sum remains the same.

Find the sum

$$\begin{array}{l} 3 + 5 = 8 \\ 5 + 3 = 8 \end{array}$$

$$\begin{array}{l} 2 + 6 = 8 \\ 6 + 2 = 8 \end{array}$$

$$\begin{array}{l} 8 + 1 = 9 \\ 1 + 8 = 9 \end{array}$$

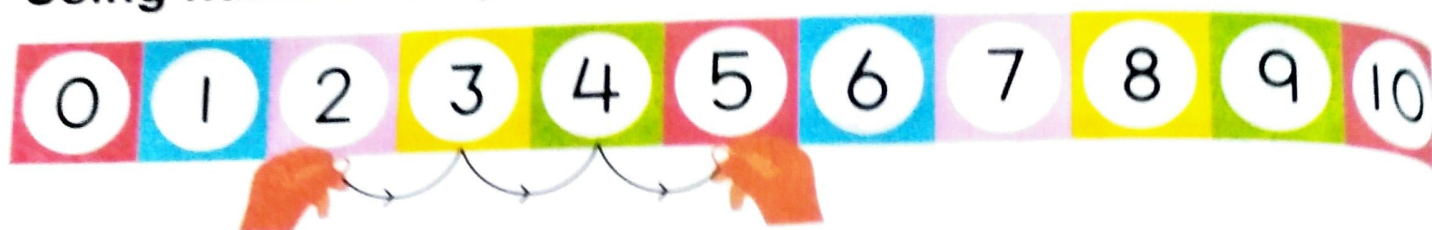
$$\begin{array}{l} 7 + 1 = 8 \\ 1 + 7 = 8 \end{array}$$

$$\begin{array}{l} 4 + 5 = 9 \\ 5 + 4 = 9 \end{array}$$

$$\begin{array}{l} 2 + 3 = 5 \\ 3 + 2 = 5 \end{array}$$

# Forward counting for addition

## Using number strip



Out of the two numbers to be added—

1. Start with the first number.
2. Move forward as many boxes as the second number.

*Example:* Add 2 and 3 by counting forward using number strip.

*Solution:* Start with 2. Put the  at 2

: Then move the finger 3 boxes forward

: You reach at 5

So,

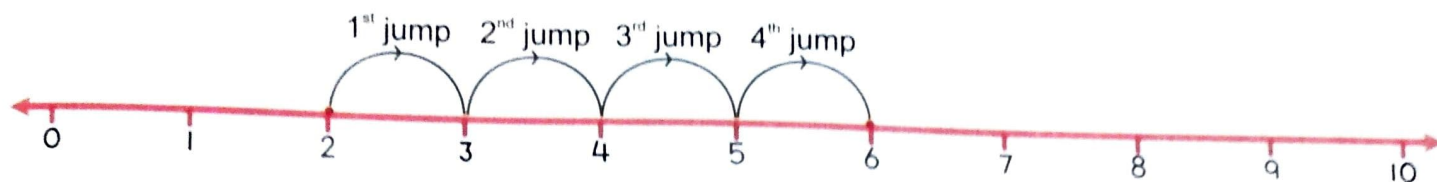
$$2 + 3 = 5$$

Fill in the boxes by counting on the number strip.

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

24

## Using number line



Out of the two numbers to be added.

1. Start with the first number.

2. Move forward by taking as many jumps as the second number.

*Example:* Add 2 and 4 using number line

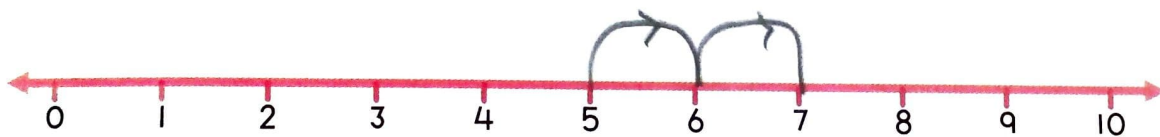
*Solution:* Start with 2

: Take 4 jumps forward

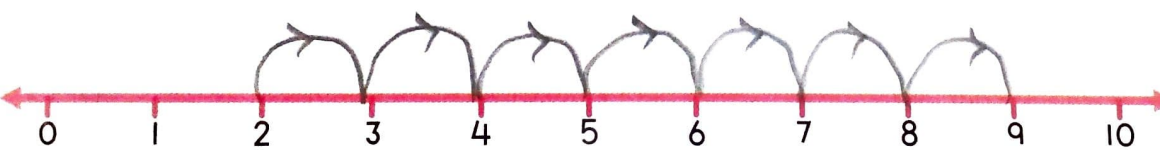
: You reach at 6

So,  $2 + 4 = 6$

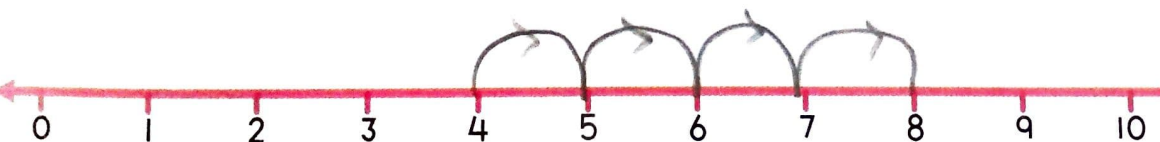
Add the following using number line.



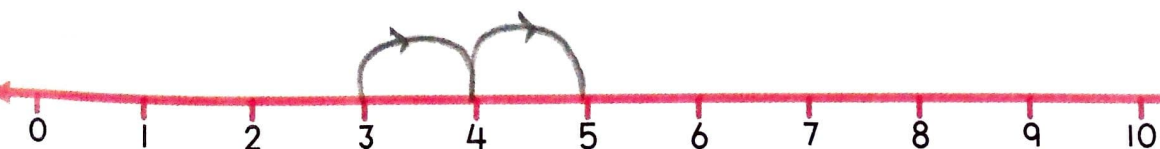
$$5 + 2 = 7$$



$$2 + 7 = 9$$



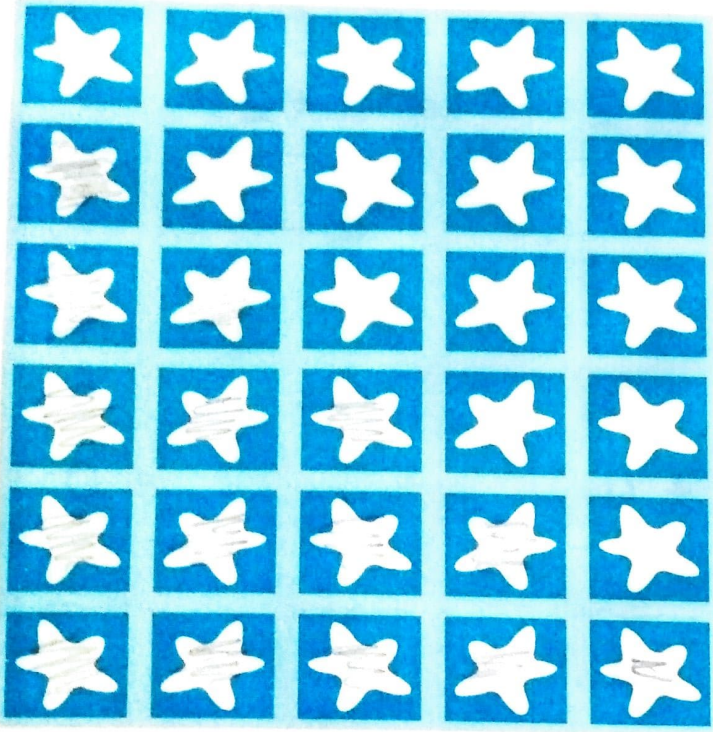
$$4 + 4 = 8$$



$$3 + 2 = 5$$

Write the addition fact for the following by shading the stars.

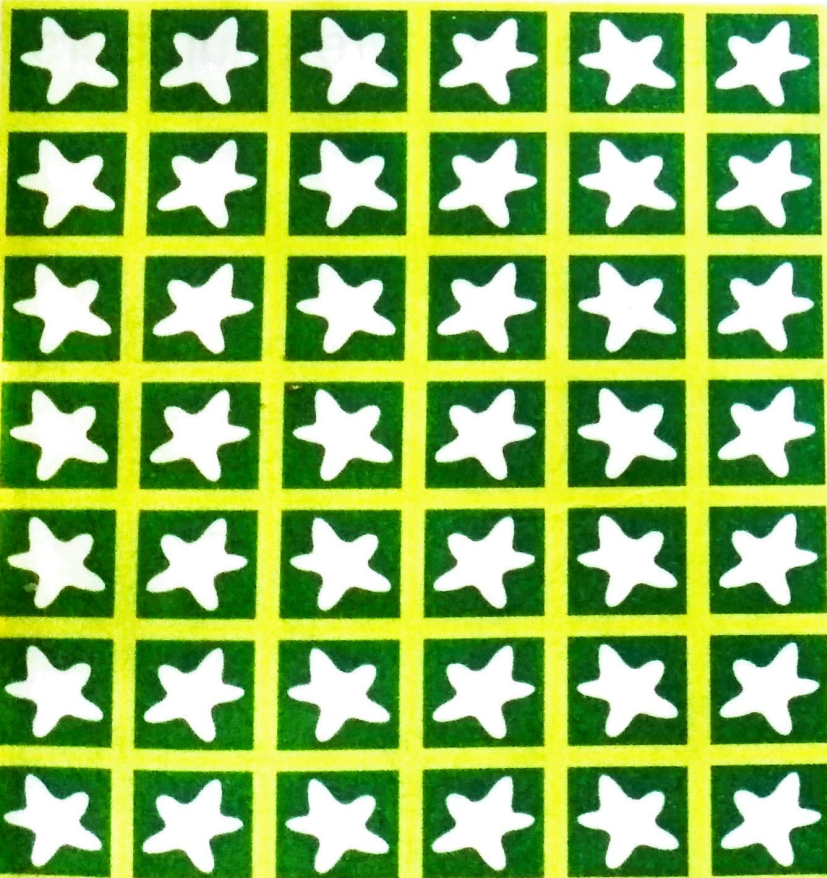
### Addition fact of 5



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

So, the number of addition facts for 5 are 6

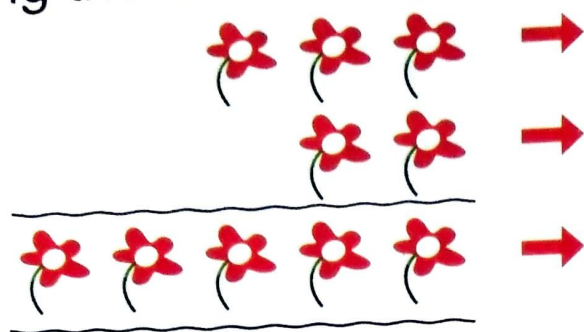
### Addition fact of 6



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

So, the number of addition facts for 6 are 7

**Vertical Addition:** We can also add the numbers by arranging them vertically.



$$\begin{array}{r} 3 \\ 2 \\ \hline 5 \end{array}$$

i.e

$$\begin{array}{r} 3 \\ + 2 \\ \hline 5 \end{array}$$

Add the following

$$\begin{array}{r} 3 \\ + 2 \\ \hline 5 \end{array}$$

9

$$\begin{array}{r} + 0 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 6 \\ + 1 \\ \hline 7 \end{array}$$

5

$$\begin{array}{r} + 1 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 7 \\ + 2 \\ \hline 9 \end{array}$$

4

$$\begin{array}{r} + 3 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 5 \\ + 4 \\ \hline 9 \end{array}$$

4

$$\begin{array}{r} + 4 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 6 \\ + 3 \\ \hline 9 \end{array}$$

5

$$\begin{array}{r} + 2 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 8 \\ + 0 \\ \hline 8 \end{array}$$

3

$$\begin{array}{r} + 1 \\ \hline 4 \end{array}$$

**Addition of three numbers:** When we add three numbers we can add them in any order.

*Example: One way*



ie

$$\boxed{1} + \boxed{2} + \boxed{3}$$

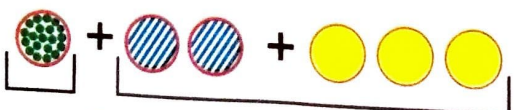
=>

$$\boxed{3} + \boxed{3}$$

6



*Other way*



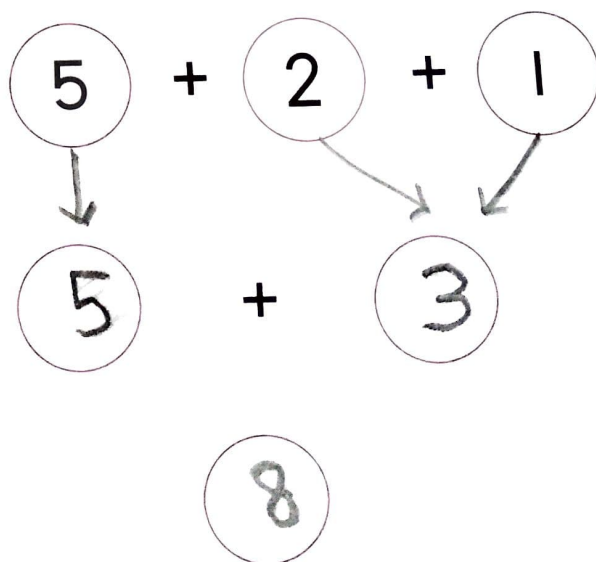
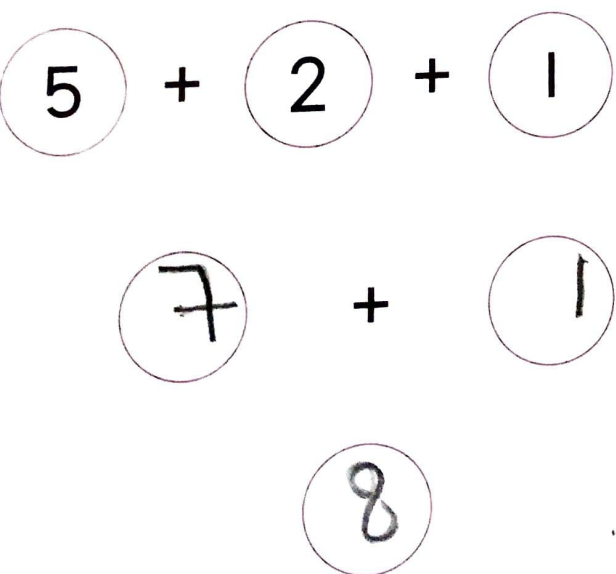
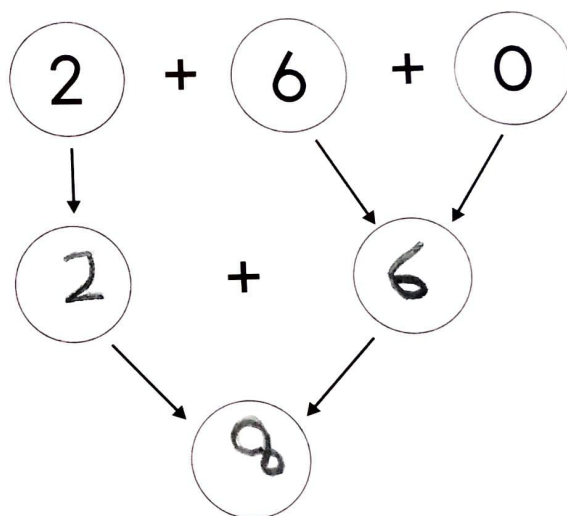
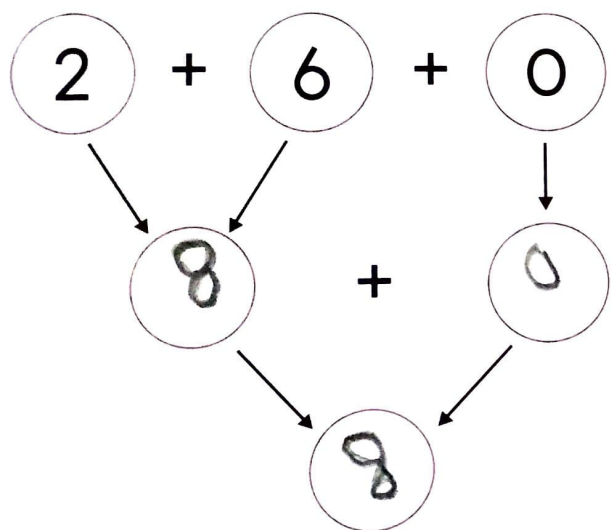
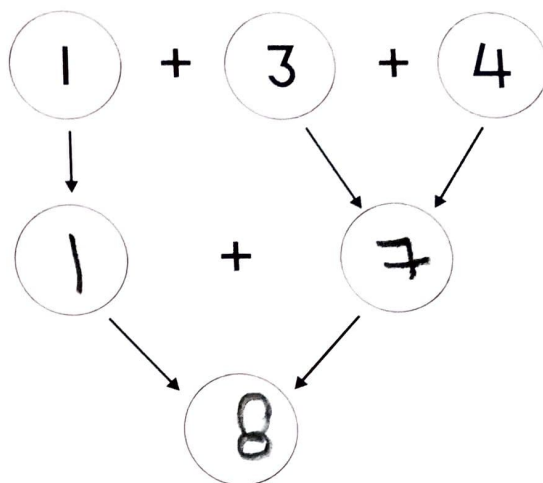
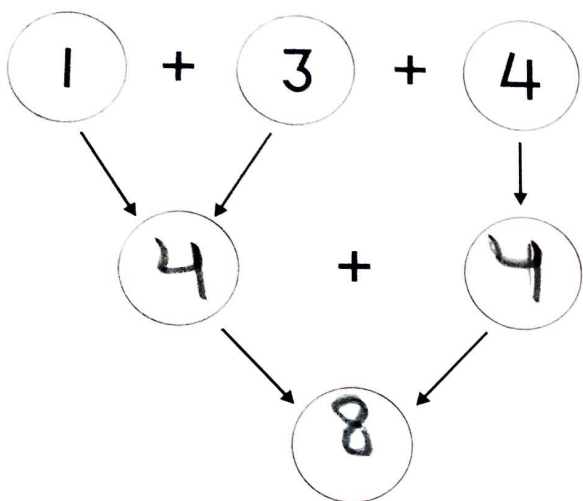
ie

$$\boxed{1} + \boxed{2} + \boxed{3}$$

=>

$$\boxed{1} + \boxed{5}$$

Add the following in two different ways.






put the arrows yourself

put the arrows yourself


# Addition of three numbers vertically

Arrange the numbers one below the other and add.

Example:

|   |     |     |
|---|-----|-----|
|  | → 3 | → 5 |
|  | → 2 |     |
|  | → 4 | → 4 |

---

|  |     |
|--|-----|
|  | → 9 |
|--|-----|

ie

|     |   |
|-----|---|
| 3   | → |
| + 2 | → |
| + 4 | → |
| 9   |   |

Add the following

$$\begin{array}{r} 5 \\ + 2 \\ + 1 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 1 \\ + 2 \\ + 3 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 4 \\ + 2 \\ + 0 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 5 \\ + 1 \\ + 3 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 2 \\ + 1 \\ + 4 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 6 \\ + 0 \\ + 1 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 2 \\ + 2 \\ + 4 \\ \hline 8 \end{array}$$

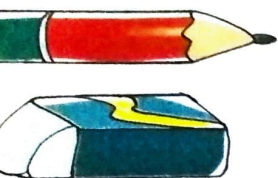
$$\begin{array}{r} 3 \\ + 5 \\ + 0 \\ \hline 8 \end{array}$$

# Word Problems



There are 4 flowers in the vase  
There are 3 flowers on the table  
There are  flowers altogether

$$\begin{array}{r} 4 \\ + 3 \\ \hline 7 \end{array}$$



A pencil costs Rs 5  
An eraser costs Rs 2.  
The total cost of both is

$$\begin{array}{r} 5 \\ + 2 \\ \hline 7 \end{array}$$



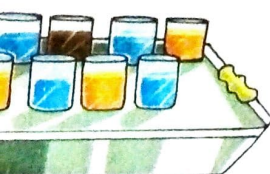
Tanya puts 6 green beads and 3 white beads in the string.  
The total number of beads in the string are

$$\begin{array}{r} 6 \\ + 3 \\ \hline 9 \end{array}$$



There are 5 butterflies sucking nectar from flowers. No more butterflies join in. So there are  butterflies on the flowers.

$$\begin{array}{r} 5 \\ + 0 \\ \hline 5 \end{array}$$



A tray has 4 glasses of water, 3 glasses of juice and 2 glasses of cold drink. Together there are  glasses in the tray.

$$\begin{array}{r} 4 \\ + 3 \\ + 2 \\ \hline 9 \end{array}$$