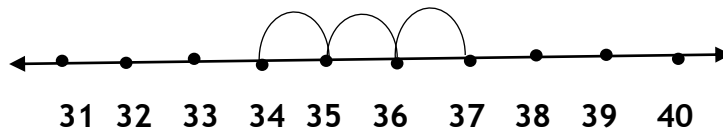# PON VIDYASHRAM GROUP OF SENIOR SECONDARY SCHOOLS
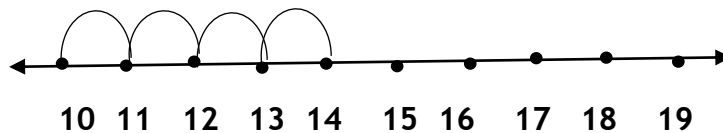
## CLASS – II MATHEMATICS NOTES SEPTEMBER
## 5. ADDITION

Addition is finding the total, or sum, by combining two or more numbers.

**I.  Add the following using the number line:**

1. 34 + 3 = 37



31  32  33  34  35  36  37  38  39  40

2. 10 + 4 = 14



10  11  12  13  14  15  16  17  18  19

**II. Addition of 2 digit numbers without regrouping :**

1.
```
  T O
  5 6
+ 1 3
─────
  6 9
─────
```

2.
```
  T O
    2 4
+   6 0
─────
    8 4
─────
```

3.
```
  T O
  2 1
+ 3 4
─────
  5 5
─────
```

4.
```
  T O
    7 2
+   2 5
─────
    9 7
─────
```

**III.  Adding a 1 – digit number to a 2 digit number  (with regrouping ):**

1.
```
    T  O
    1  6
 +     6
 ─────────
    2  2
 ─────────
```

2.
```
    T  O
    2  8
 +     9
 ─────────
    3  7
 ─────────
```

3. .
```
    T  O
    5  5
 +     7
 ─────────
    6  2
 ─────────
```

4.
```
    T  O
    4  4
 +     6
 ─────────
    5  0
 ─────────
```

**IV.  Addition of 2 – digit numbers with carrying   (or with regrouping ):**

1.
```
    T  O
    4  8
 +  3  6
 ─────────
    8  4
 ─────────
```

2.
```
    T  O
    5  5
 +  3  7
 ─────────
    9  2
 ─────────
```

3. .
```
    T  O
    4  3
 +  1  8
 ─────────
    6  1
 ─────────
```

4.
```
    T  O
    5  8
 +  2  9
 ─────────
    8  7
 ─────────
```

**V. Addition of 3 numbers**

1.
```
    T  O
    3  2
 +  1  7

 +  3  6
 ─────────
    8  5
 ─────────
```

2.
```
    T  O
    1  3
 +  1  4

 +  2  7
 ─────────
    5  4
 ─────────
```

3.
```
    T  O
    2  8
 +  3  3

 +  3  2
 ─────────
    9  3
 ─────────
```

4.
```
    T  O
    2  7
 +  2  5

 +  2  6
 ─────────
    7  8
 ─────────
```

## VI. Addition of 3 – digit numbers with 2-digit number   (without regrouping ):

1.
```
  H  T  O
     8  5  6
  +     3  3
  ─────────────
     8  8  9
  ─────────────
```

2.
```
  H  T  O
     9  6  4
  +     2  3
  ─────────────
     9  8  7
  ─────────────
```

3. .
```
  H  T  O
     3  1  1
  +     7  2
  ─────────────
     3  8  3
  ─────────────
```

4.
```
  H  T  O
     9  0  2
  +     9  3
  ─────────────
     9  9  5
  ─────────────
```

## VII. Solve the following word problems :

**1. sujal had 63 pens. Kashish gave him 24 pens.  How many pens does sujal have now ?**

OP : +

|                                 |   | T | 0 |   |
|---------------------------------|---|---|---|---|
| Number of pens sujal had        | = | 6 | 3 |   |
| Number of pens kashish gave     | = | 2 | 4 | + |
| Total number of pens            |   | 8 | 7 |   |

**Ans :  Sujal has  87 pens now.**

**2.  46 boys and 29 girls went for picnic organised by ABC school. How many students went for picnic in all ?**

OP : +

|                            |   | T | 0 |   |
|----------------------------|---|---|---|---|
| Number of boys             | = | 4 | 6 |   |
| Number of girls            | = | 2 | 9 | + |
| Total number of students   | = | 7 | 5 |   |

**Ans. : 75 students went for picnic in all.**

**3. There are 312 pins in box 1 and 64 pins in box 2. How many pins are there in both the boxes ?**

$$\boxed{\text{OP : +}}$$

|  | H | T | 0 |
|---|---|---|---|
| Number of pins in box 1 =  | 3 | 1 | 2 |
| Number of pins in box 2 =  |  | 6 | 4 | + |
| Total Number of pins in Both boxes | 3 | 7 | 6 |

**Ans. : There are 376 pins in both the boxes.**

**VIII. Mind Map:**



2-digit numbers without carrying

1-digit to a 2-digit number

Number Lines

Addition

2-digit numbers without carrying

Addition of 3 numbers

Word problems