

## Addition of Two 2-digit Numbers (without carry over)

### Example

Add 12 and 15.

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 1 \quad 2 \\
 + 1 \quad 5 \\
 \hline
 2 \quad 7
 \end{array}$$

**Method :**

**Step 1 :** Write the tens digit below tens' column and the ones digit below ones' column.

**Step 2 :** First, add the ones together and write below ones' column.

$$2 \text{ ones} + 5 \text{ ones} = 7 \text{ ones}$$

**Step 3 :** Then, add the tens together and write below tens' column.

$$1 \text{ ten} + 1 \text{ ten} = 2 \text{ tens}$$

**Ans. 27**

### Exercise

Add the following.

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 3 \quad 5 \\
 + 1 \quad 2 \\
 \hline
 4 \quad 7
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 1 \quad 3 \\
 + 2 \quad 5 \\
 \hline
 3 \quad 8
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 5 \quad 4 \\
 + 3 \quad 2 \\
 \hline
 8 \quad 6
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 4 \quad 2 \\
 + 3 \quad 5 \\
 \hline
 7 \quad 7
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 2 \quad 3 \\
 + 2 \quad 0 \\
 \hline
 4 \quad 3
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 4 \quad 4 \\
 + 2 \quad 2 \\
 \hline
 6 \quad 6
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 2 \quad 5 \\
 + 3 \quad 3 \\
 \hline
 5 \quad 8
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 5 \quad 5 \\
 + 2 \quad 2 \\
 \hline
 7 \quad 7
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 7 \quad 2 \\
 + 2 \quad 0 \\
 \hline
 9 \quad 2
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 6 \quad 0 \\
 + 2 \quad 0 \\
 \hline
 8 \quad 0
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 3 \quad 3 \\
 + 1 \quad 1 \\
 \hline
 4 \quad 4
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 7 \quad 9 \\
 + 2 \quad 0 \\
 \hline
 9 \quad 9
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 7 \quad 6 \\
 + 1 \quad 1 \\
 \hline
 8 \quad 7
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 9 \quad 5 \\
 + 0 \quad 2 \\
 \hline
 9 \quad 7
 \end{array}$$

$$\begin{array}{r}
 \text{T} \quad \text{O} \\
 8 \quad 5 \\
 + 1 \quad 0 \\
 \hline
 9 \quad 5
 \end{array}$$

**Example 2** Add 13, 24 and 35.

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 1 \ 3 \\
 2 \ 4 \\
 + 3 \ 5 \\
 \hline
 7 \ 2
 \end{array}$$

**Step 1 :** Add the ones together.

$$\begin{aligned}
 3 \text{ ones} + 4 \text{ ones} + 5 \text{ ones} &= 12 \text{ ones} \\
 12 \text{ ones} &= 10 \text{ ones} + 2 \text{ ones} \\
 &= 1 \text{ ten} + 2 \text{ ones}
 \end{aligned}$$

Write 2 under ones' column and carry over 1 ten to the tens' column.

**Step 2 :** Add the tens together including the carry over.  
 $1 \text{ ten} + 2 \text{ tens} + 3 \text{ tens} + 1 \text{ ten}$  (carry over)  
 $= 7 \text{ tens}$

Write 7 under tens' column.

**Ans. 72**

## Exercise

Add the following by regrouping.

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 8 \ 6 \\
 + 1 \ 5 \\
 \hline
 1 \ 0 \ 1
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 4 \ 7 \\
 + 4 \ 5 \\
 \hline
 9 \ 2
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 3 \ 5 \\
 + 4 \ 6 \\
 \hline
 8 \ 1
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 7 \ 5 \\
 + 1 \ 5 \\
 \hline
 9 \ 0
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 7 \ 5 \\
 + 1 \ 6 \\
 \hline
 9 \ 1
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 5 \ 7 \\
 + 1 \ 3 \\
 \hline
 7 \ 0
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 3 \ 9 \\
 + 2 \ 7 \\
 \hline
 6 \ 6
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 5 \ 8 \\
 + 1 \ 8 \\
 \hline
 7 \ 6
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 5 \ 5 \\
 + 0 \ 7 \\
 \hline
 6 \ 2
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 1 \ 9 \\
 + 1 \ 7 \\
 \hline
 3 \ 6
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 4 \ 3 \\
 1 \ 4 \\
 + 2 \ 3 \\
 \hline
 8 \ 0
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 2 \ 3 \\
 3 \ 5 \\
 + 3 \ 6 \\
 \hline
 9 \ 4
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 1 \ 4 \\
 4 \ 5 \\
 + 2 \ 7 \\
 \hline
 8 \ 6
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 2 \ 2 \\
 5 \ 5 \\
 + 1 \ 4 \\
 \hline
 9 \ 1
 \end{array}$$

$$\begin{array}{r}
 \text{T O} \\
 \textcircled{1} \\
 3 \ 8 \\
 1 \ 4 \\
 + 2 \ 2 \\
 \hline
 7 \ 4
 \end{array}$$