

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.

$$\begin{array}{r} \text{T} \quad \text{O} \\ 3 \quad 5 \\ + 1 \quad 2 \\ \hline 47 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 1 \quad 3 \\ + 2 \quad 5 \\ \hline 38 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 5 \quad 4 \\ + 3 \quad 2 \\ \hline 86 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 4 \quad 2 \\ + 3 \quad 5 \\ \hline 77 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 2 \quad 3 \\ + 2 \quad 0 \\ \hline 43 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 4 \quad 4 \\ + 2 \quad 2 \\ \hline 66 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 2 \quad 5 \\ + 3 \quad 3 \\ \hline 38 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 5 \quad 5 \\ + 2 \quad 2 \\ \hline 77 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 7 \quad 2 \\ + 2 \quad 0 \\ \hline 92 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 6 \quad 0 \\ + 2 \quad 0 \\ \hline 80 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 3 \quad 3 \\ + 1 \quad 1 \\ \hline 44 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 7 \quad 9 \\ + 2 \quad 0 \\ \hline 99 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 7 \quad 6 \\ + 1 \quad 1 \\ \hline 87 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 9 \quad 5 \\ + 0 \quad 2 \\ \hline 97 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 8 \quad 5 \\ + 1 \quad 0 \\ \hline 95 \end{array}$$

Example 2 Add 13, 24 and 35.

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

Step 1 : Add the ones together.

$$3 \text{ ones} + 4 \text{ ones} + 5 \text{ ones} = 12 \text{ ones}$$

$$12 \text{ ones} = 10 \text{ ones} + 2 \text{ ones}$$

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

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

Step 2 : Add the tens together including the carry over.

$$1 \text{ ten} + 2 \text{ tens} + 3 \text{ tens} + 1 \text{ ten} (\text{carry over})$$

$$= 7 \text{ tens}$$

Write 7 under tens' column.

Ans. 72

Exercise

Add the following by regrouping.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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