

# Mental Math: Left-To-Right Addition (2-Digit Numbers)

Key idea: Simplify the problem by breaking it into parts.

Step	Example
	$47 + 32 =$
Separate the 2 <sup>nd</sup> number into 10s and 1s	$47 + 32 = 47 + 30 + 2$
first add the 10s	$47 + 30 = 77$
Then add the 1s	$77 + 2 = 79$

## Practice

$\begin{array}{r} 23 \\ +16 \\ \hline \end{array}$	$\begin{array}{r} 64 \\ +43 \\ \hline \end{array}$	$\begin{array}{r} 95 \\ +32 \\ \hline \end{array}$	$\begin{array}{r} 34 \\ +26 \\ \hline \end{array}$	$\begin{array}{r} 89 \\ +78 \\ \hline \end{array}$
$\begin{array}{r} 73 \\ +58 \\ \hline \end{array}$	$\begin{array}{r} 47 \\ +36 \\ \hline \end{array}$	$\begin{array}{r} 19 \\ +17 \\ \hline \end{array}$	$\begin{array}{r} 55 \\ +49 \\ \hline \end{array}$	$\begin{array}{r} 39 \\ +38 \\ \hline \end{array}$

## Answers to practice:

$\begin{array}{r} 23 \\ +16 \\ \hline 39 \end{array}$	$\begin{array}{r} 64 \\ +43 \\ \hline 107 \end{array}$	$\begin{array}{r} 95 \\ +32 \\ \hline 127 \end{array}$	$\begin{array}{r} 34 \\ +26 \\ \hline 60 \end{array}$	$\begin{array}{r} 89 \\ +78 \\ \hline 167 \end{array}$
$\begin{array}{r} 73 \\ +58 \\ \hline 131 \end{array}$	$\begin{array}{r} 47 \\ +36 \\ \hline 83 \end{array}$	$\begin{array}{r} 19 \\ +17 \\ \hline 36 \end{array}$	$\begin{array}{r} 55 \\ +49 \\ \hline 104 \end{array}$	$\begin{array}{r} 39 \\ +38 \\ \hline 77 \end{array}$

## Game: Add & Flip Battle

### Materials needed:

- Set of Double 9 dominoes
- Coin for Flipping
- Dry erase board/markers/eraser

### To play:

- Turn all dominoes upside down and mix them.
- Each player draws 2 dominos and treats them as 2-digit numbers.
- Both players add their numbers together using mental math. (No fair writing it down.) If answers are the same, both players get a point.
- If answers are different, flip the coin to determine whether the higher number or lower number wins. (Heads = Higher, Tails = lower)
- Keep score on the dry erase board.

**To win:** Player with the most points when all the dominoes have been used is the winner.

Variation: Institute a challenge. If one player thinks the other had added incorrectly, he/she can challenge. If the challenger wins, they get a point. If the original answer was correct, that player gets a point.