

The Mystery Number Hunt

This game lets you practice addition and subtraction within 100, just like we do in math class ([Outcome](#)). You will add three numbers together ([Skills](#)), use a doubles or make-a-ten trick ([Knowledge](#)), and check your answer with subtraction ([Skills](#)). Have fun solving it!

The puzzle

A secret number is hiding somewhere between 1 and 100.

Follow these three clues to find it.

Clue 1: Add three piles together: 10 stickers, 10 stickers, and 26 stickers. The total is the secret number.

Clue 2: If you add 4 to the secret number, you land exactly on a multiple of ten.

Clue 3: If you subtract the secret number from 100, the difference is 54.

What is the secret number?

Hints

Hint 1: Start with Clue 1. Add the three piles in any order you like. The order does not change the total.

Hint 2: Once you have a number from Clue 1, add 4 to it. Does it land on a nice round number like 40 or 50?

Hint 3: Take your number and subtract it from 100. If the answer is 54, you found the secret number. If not, go back and check your first addition.

Answer key

The secret number is 46.

Reasoning:

Clue 1: $10 + 10 + 26 = 46$. You can add these in any order and still get 46, because the order of addends does not change the sum ([Knowledge](#)).

Clue 2: $46 + 4 = 50$, a multiple of ten. This checks that 46 is correct.

Clue 3: $100 - 46 = 54$. Subtracting is the inverse of adding, so this step verifies the answer ([Skills](#)).

All three clues agree, so 46 is the secret number. All three clues agree, so 46 is the secret number.