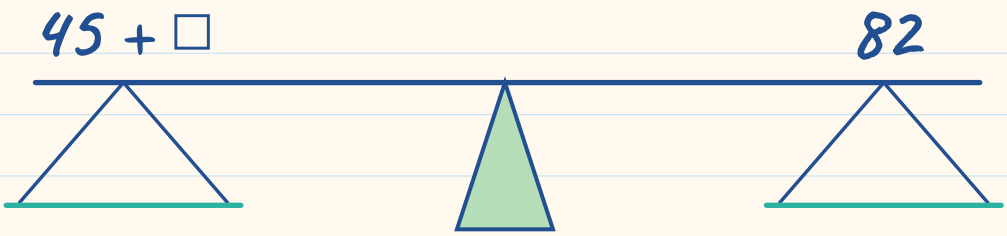
Find the missing number

Algebra · VC2M4A01

The equals sign means both sides have the same value. A box stands for an unknown.



Both sides balance: □ = 82 − 45 = 37

☆ Equality and addition properties

Both sides of = have the same value: 8 + 5 = 10 + 3.

Swap: 8 + 5 = 5 + 8. Regroup: (8 + 2) + 5 = 8 + (2 + 5).

Adding zero changes nothing: 23 + 0 = 23.

☆ Find a missing addend

45 + □ = 82

Use subtraction: 82 − 45 = 37.

Check: 45 + 37 = 82, so □ = 37.

☆ Find an unknown in subtraction

□ − 28 = 46, so □ = 46 + 28 = 74.

90 − □ = 54, so □ = 90 − 54 = 36.

The position of the box tells you what needs undoing.

☆ Calculations on both sides

74 + 36 = 8 + □. 110 = 8 + □, so □ = 102.

138 − 47 = 103 − □. 91 = 103 − □, so □ = 12.

14 + 32 = 61 − □. 46 = 61 − □, so □ = 15.

Remember...

Addition and subtraction undo each other.

Put your answer back into the original box to check it.