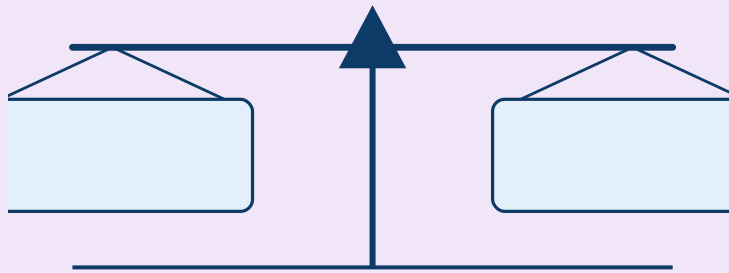


## FINDING X IN $x + 3 = 7$

- 1 Write  $x + 3$  on the left pan.
- 2 Write **7** on the right pan.
- 3 Take **3** from both pans to leave  $x = 4$ .

 **WARM-UP**

**Draw balance scales to make both sides equal.**



1. Put  $x + 8$  on left and 9 on right
2. Put  $2x$  on left and 12 on right
3. Put  $3x + 1$  on left and 10 on right

## PRACTICE

- 1 In a board game a player hides  $x$  counters then adds 3 more to reach 7.

$x + 3 = ?$

- 2 Two players each hide the same number  $x$  of tokens and together they have 12.

$$2x = ?$$

- 3 A card game hides  $x$  cards then adds 4 to reach 9.

$$x + 4 = ?$$

- 4** A puzzle bag starts with  $x$  marbles and **5** more are added to make **5**.

$x + 5 = ?$

## ALWAYS, SOMETIMES, NEVER

**Always, sometimes or never true? Write A, S or N.**

- a. The letter  $x$  stands for an unknown number.
- b.  $x$  has the same value everywhere in one balance puzzle.
- c. In  $x + 3 = 10$ ,  $x$  stands for a number bigger than 100.
- d.  $2x$  means  $x$  added to itself.