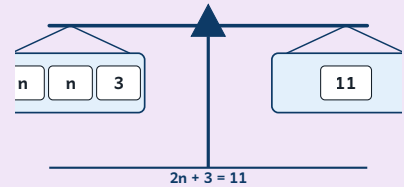


Solving two-step equations

WHAT THIS LESSON TEACHES

A **two-step equation** is undone in two stages — undo the adding/subtracting first, then the multiplying/dividing.

$$\rightarrow 2n + 3 = 11 \rightarrow -3 \rightarrow 2n = 8 \rightarrow \div 2 \rightarrow n = 4.$$



MODEL THIS ON THE BOARD

SOLVE $2n + 3 = 11$

- 1 Undo the $+ 3$ first: $2n = 11 - 3 = 8$.
- 2 Undo the $\times 2$: $n = 8 \div 2 = 4$.
- 3 Check: $2 \times 4 + 3 = 11$. ✓

ANSWER KEY

W1: $x = 3$

W2: $x = 10$

Q1: $x = 7$

Q2: $x = 11$

Spot:

Undo the $+ 3$ first: $2n = 11 - 3 = 8$, then $\div 2 \rightarrow n = 4$. (Check: $2 \times 4 + 3 = 11$. ✓)

EXTENSION SHEET · STRETCH ANSWERS

S1: $x = 11$

S2: $x = 9$

S3: $x = 5$