

Solving two-step equations

WHAT THIS LESSON TEACHES

An equation where the letter has two things done to it, for example multiplied and then added, as in $2x + 3 = 11$.

$$\rightarrow 2x + 3 = 11$$

$$\rightarrow 2x + 5 = 13$$

MODEL THIS ON THE BOARD

SOLVING ON THE SCALES

- 1 Take the loose cubes off both sides first
- 2 Then share out the bags by dividing

ANSWER KEY

Scaffold: visual check on the page

Q1: 4

Q2: 4

Q3: 6

Q4: 5

a) Always — This undoes the operations in the correct order.

b) Sometimes — Some like $4x + 6 = 12$ give a fraction.

c) Always — It isolates the term with the variable.

d) Never — The order of inverse operations must be followed.

EXTENSION SHEET · STRETCH ANSWERS

S1: $x = 11$

S2: $x = 10$

S3: $x = 8$

S4: $x = 5$

S5: $x = 7$