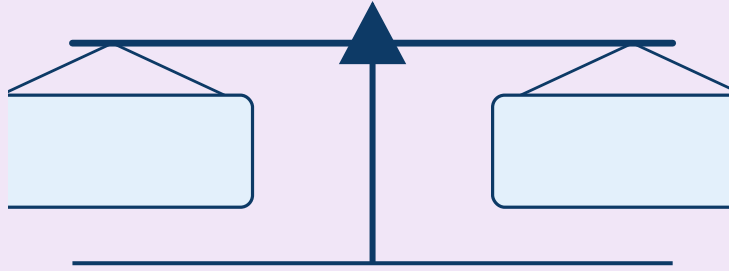


SOLVING ON THE SCALES

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

WARM-UP

Draw the balance scales for each game puzzle and make both sides equal.



1. Place two bags and three loose cubes on left with eleven on right
2. Place two bags and five loose cubes on left with thirteen on right
3. Place five bags minus four loose cubes on left with twenty-one on right

PRACTICE

- 1 In the card game two mystery cards plus three points balance eleven points total.
 $2x + 3 = \underline{\hspace{2cm}}$
- 2 In the board game two mystery tokens plus five points balance thirteen points total.
 $2x + 5 = \underline{\hspace{2cm}}$
- 3 In the dice game three mystery dice plus two points balance twenty points total.
 $3x + 2 = \underline{\hspace{2cm}}$
- 4 In the puzzle game five mystery cards minus four points balance twenty-one points total.
 $5x - 4 = \underline{\hspace{2cm}}$

SPOT THE MISTAKE

Conor solves $2n + 3 = 11$:

Divide both sides by 2: $n + 3 = 5.5$
 Subtract 3: $n = 2.5$

Find Conor's mistake. What is the correct value of n ?

The mistake Correct answer