

TIDYING AN EXPRESSION

- 1 Underline all x-terms in one colour and plain numbers in another.
- 2 Add the x coefficients: $4 + 2$ makes 6 so the x part is $6x$.
- 3 Keep the plain number as $+3$.
- 4 The simplified expression is $6x + 3$.

WARM-UP

Simplify each expression and write the tidied form on the line.

1. Simplify $5x + 2 + 3x + x + 4$ on the first line
2. Simplify $6x + 8 + 2x + 5$ on the second line
3. Simplify $9x + 4 + x + 7 + 2x$ on the third line

$5x + 2 + 3x + x + 4 =$

$6x + 8 + 2x + 5 =$

$9x + 4 + x + 7 + 2x =$

PRACTICE

- 1 In a card game you score $3x$ points then $5x$ more from a bonus round.
 $3x + 5x = ?$
- 2 A board game gives $10x$ points for level one and $11x$ for level two plus **12** extra.
 $10x + 11x + 12 = ?$
- 3 In a playground game you earn $8x$ tokens then one more x and **9** loose tokens.
 $8x + x + 9 = ?$
- 4 A video game awards $14x$ points then **15** plain points followed by $16x$ more.
 $14x + 15 + 16x = ?$
- 5 A team scores $6x$ in round one and $7x$ in round two plus **5** bonus points.
 $6x + 7x + 5 = ?$

ALWAYS, SOMETIMES, NEVER

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

- a. $3x$ and $4x$ can be added together because they are like terms. ☐
- b. Plain numbers like 2 and 5 are like terms with each other. ☐
- c. $4x + 3$ simplifies to $7x$. ☐
- d. Expressions with only x terms simplify to a single x term. ☐

