Lesson 110 ALGEBRA

Simplifying simple expressions

WHAT THIS LESSON TEACHES

Like terms are terms with the same letter or all plain numbers and can be added or subtracted to simplify.

→ 3x and 5x are like terms so 3x + 5x becomes 8x.

→ 4x + 3 + 2x tidies to 6x + 3.

MODEL THIS ON THE BOARD

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.

ANSWER KEY

a) $9x + 6$

b) $8x + 13$

c) $12x + 11$

Q1: $8x$

Q2: $21x + 12$

Q3: $9x + 9$

Q4: $30x + 15$

Q5: $13x + 5$

a) Always — Both have the letter x so they combine to 7x.

b) Always — They are both plain numbers so they add to 7.

c) Never — The plain 5 cannot join the x term so it stays 3x + 5.

d) Always — Any number of x's count the same thing so they combine.

EXTENSION SHEET · STRETCH ANSWERS

S1: commutative property

S2: associative property