

Simplifying simple expressions

MODULE 10 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS

ALGEBRA

HOW TO ANSWER TODAY

- **Property names.** Order swaps ($a + b = b + a$) → commutative. Brackets move ($(a+b)+c = a+(b+c)$) → associative. One spreads over two ($a(b+c) = ab+ac$) → distributive.

 STRETCH PROBLEMS

- 1** At Camogie training under the floodlights, Aoife sets up **5** rows of **3** cones for a passing drill. Saoirse sets up **3** rows of **5** cones for the same drill, and notices both layouts have the same number of cones, so **5** $\times$ **3** = **3** $\times$ **5**. Which property of operations does this equation show: commutative, associative, or distributive?

- 2 Mr Ó Briain is sorting the classroom store and writes this on the board: $(7 \times 9) \times 2 = 7 \times (9 \times 2)$. He asks 5th class which property of operations it shows. Is it the commutative, associative, or distributive property?

Which property of operations does this equation show: $(7 \times 9) \times 2 = 7 \times (9 \times 2)$? (Choose: commutative, associative, or distributive.)