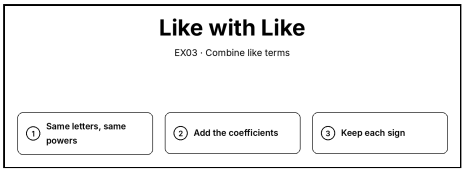
Like with Like: teacher script

EX03-V1 · EX03 Combine like terms · teachers only. Without a screen, read each Say line and draw each Draw step on the board. About 89 seconds as a video.

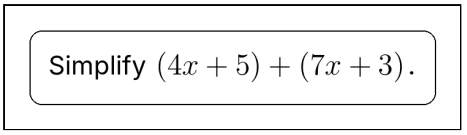
01



Say. Like with like. Like terms have the same letters with the same powers. Add their coefficients, and keep each sign with its term.

Draw. Write the title “Like with Like” and the steps: 1. Same letters, same powers; 2. Add the coefficients; 3. Keep each sign.

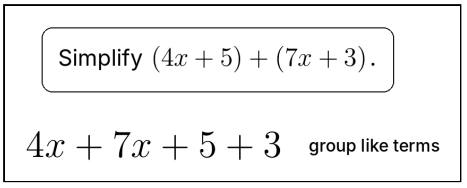
02



Say. Simplify (4x + 5) + (7x + 3).

Draw. Clear the board. Write “Simplify (4x + 5) + (7x + 3).” in a box at the top.

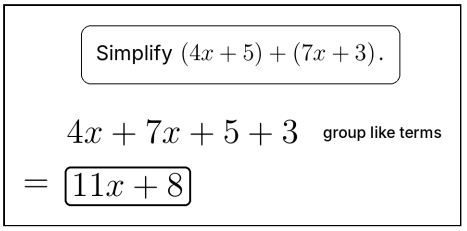
03



Say. Group the like terms: the x terms together, and the numbers together.

Draw. Write 4x + 7x + 5 + 3 on the next line. Beside it, write “group like terms”.

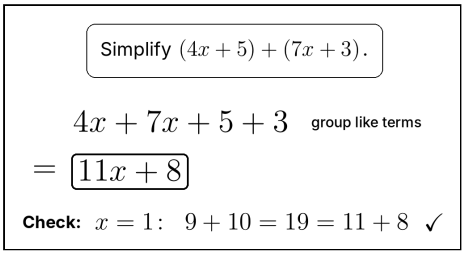
04



Say. Four x plus seven x is eleven x, and five plus three is eight: 11x + 8.

Draw. Write = 11x + 8 and box it on the next line.

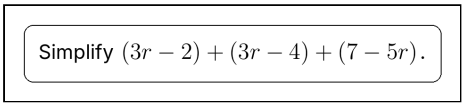
05



Say. Check with x = 1: the original gives nine plus ten, which is 19, and eleven plus eight is 19 too.

Draw. Below, write “Check: x = 1: 9 + 10 = 19 = 11 + 8” and tick it ✓.

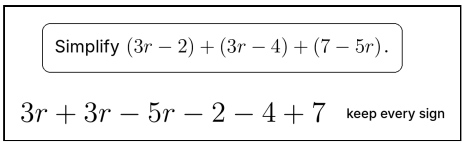
06



Say. Now simplify (3r − 2) + (3r − 4) + (7 − 5r).

Draw. Clear the board. Write “Simplify (3r − 2) + (3r − 4) + (7 − 5r).” in a box at the top.

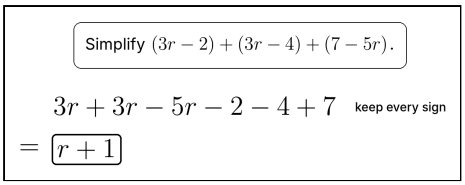
07



Say. Take the brackets away and group the terms, keeping every sign.

Draw. Write 3r + 3r − 5r − 2 − 4 + 7 on the next line. Beside it, write “keep every sign”.

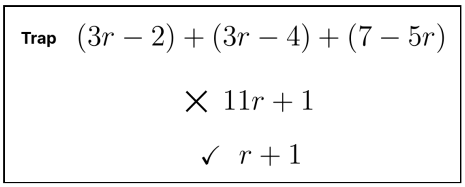
08



Say. Three plus three minus five is one lot of r, and the numbers make one: r + 1.

Draw. Write = r + 1 and box it on the next line.

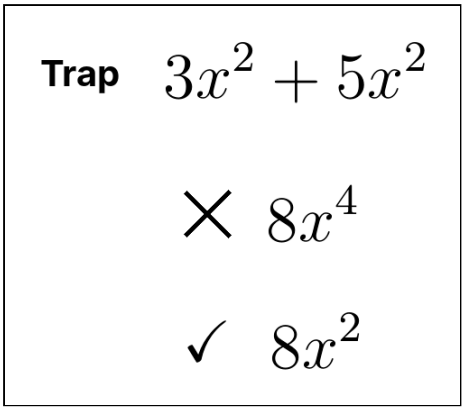
09



Say. Watch for the trap: losing a sign. Turning minus five r into plus five r gives 11r + 1, which is wrong. Keep the minus: r + 1.

Draw. Clear the board. Write “Trap” and (3r − 2) + (3r − 4) + (7 − 5r). Below, write 11r + 1 and cross it out ×. Then write r + 1 with a tick ✓.

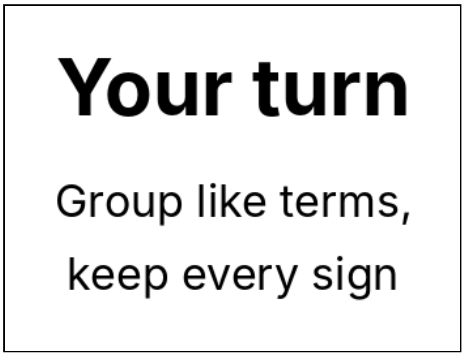
10



Say. One more: the power never changes. 3x² + 5x² is not 8x⁴. Add the coefficients only: 8x².

Draw. Clear the board. Write “Trap” and 3x² + 5x². Below, write 8x⁴ and cross it out ×. Then write 8x² with a tick ✓.

11



Say. Now it is your turn. Group like terms, and keep every sign with its term.

Draw. Point to today’s activity: Group like terms, keep every sign