

1 Expression, equation, formula or inequality? ☐

a) Write the right word from the box next to each one.

expression equation formula inequality

$5 + 2n$ _____ $T = 4n$ _____

$n < 6$ _____ $3n = 21$ _____

b) Tickets cost £3 each. Write a formula for the cost, £C, of n tickets.

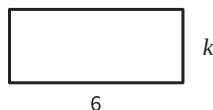
a) expression, formula, inequality, equation

b) $C = 3n$

2 Algebraic notation: multiplying ☐

a) Write the area of this rectangle using algebra.

b) Simplify $3a \times 4b$



a) $6 \times k = 6k$

b) $3 \times 4 = 12$, so $12ab$

3 Collecting like terms ☐

a) Simplify $7m + 2m - 3m$

b) Simplify $4a + 3b + 2a + b$

a) $6m$

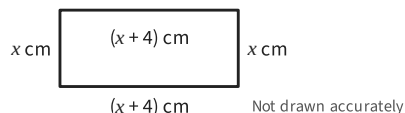
b) $6a + 4b$

4 Collecting like terms: perimeter ☐

Here is a rectangle.

a) Write an expression for its perimeter in its simplest form.

b) Find the perimeter when $x = 3$.



a) $x + 4 + x + x + 4 + x = 4x + 8$

b) $4 \times 3 + 8 = 20 \text{ cm}$

Algebra 1 revision mat answers

Foundation B

5 Expanding single brackets ☐

a) Expand $5(y - 2)$

b) Expand and simplify $4(x + 2) + 2(x + 5)$

a) $5y - 10$

b) $4x + 8 + 2x + 10$

$6x + 18$

6 Expanding double brackets ☐

a) Complete the grid to expand and simplify $(x + 3)(x + 4)$

b) Expand and simplify $(x + 1)(x + 5)$

x	x	+4
x	x^2	$4x$
+3	$3x$	12

a) $x^2 + 4x + 3x + 12 = x^2 + 7x + 12$

b) $x^2 + 5x + x + 5$

$x^2 + 6x + 5$

7 Factorising into a single bracket ☐

a) Fill in the gaps: $4x + 12 = 4(\text{ } + \text{ })$

b) Factorise $5y - 15$

a) $4(x + 3)$

b) $5(y - 3)$

8 Substitution ☐

$x = 5$ and $y = 3$. Work out the value of

a) $4x - y$

b) $x^2 - 2y$

a) $4 \times 5 - 3 = 20 - 3 = 17$

b) $5^2 - 2 \times 3 = 25 - 6 = 19$