

1 Expression, equation, formula or inequality? ☐

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

expression equation formula inequality

$2m + 7 = 15$ _____ $F = ma$ _____

$6 - 4k$ _____ $3y \geq 12$ _____

b) A gym costs £20 to join, then £15 a month.
Write a formula for the cost, £C, of m months.

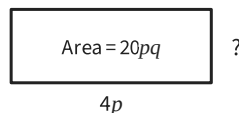
a) equation, formula, expression, inequality

b) $C = 20 + 15m$

2 Algebraic notation: multiplying ☐

a) Simplify $5m \times 2n \times m$

b) The area of this rectangle is $20pq$. Find the missing side.



a) $10m^2n$

b) $20pq = 4p \times 5q$, so $5q$

3 Collecting like terms ☐

a) Simplify $6x + 4y - 2x - 7y$

b) Kim simplifies $5p + 3q - 2p + q$ and gets $3p + 3q$.
What mistake has she made?

a) $4x - 3y$

b) q is $1q$, she left it out

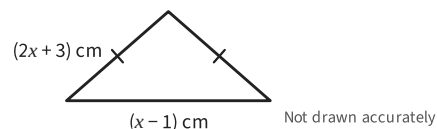
$3p + 4q$

4 Collecting like terms: perimeter ☐

The triangle is isosceles.

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

b) Find the perimeter when $x = 6$.



a) $2x + 3 + 2x + 3 + x - 1 = 5x + 5$

b) $5 \times 6 + 5 = 35$ cm

Algebra 1 revision mat answers

Foundation A

5 Expanding single brackets ☐

a) Expand $2y(3y - 4)$

b) Expand and simplify $4(3x + 2) - 3(x - 4)$

a) $6y^2 - 8y$

b) $12x + 8 - 3x + 12$

$9x + 20$

6 Expanding double brackets ☐

a) Use the grid to expand and simplify $(x + 7)(x - 2)$

b) Expand and simplify $(y - 3)^2$

x	x	+7
x	x^2	$7x$
-2	$-2x$	-14

a) $x^2 + 5x - 14$

b) $y^2 - 3y - 3y + 9$

$y^2 - 6y + 9$

7 Factorising into a single bracket ☐

a) Factorise $8y - 20$

b) Factorise fully $6a^2 + 9a$

a) $4(2y - 5)$

b) $3a(2a + 3)$

8 Substitution ☐

$p = -2$ and $q = 5$. Work out the value of

a) $3p + q$

b) $p^2 + 4q$

a) $3 \times (-2) + 5 = -1$

b) $(-2)^2 + 4 \times 5 = 4 + 20 = 24$